```
Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:ssspta1653hxp

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09   CA/CAplus records now contain indexing from 1907 to the
                   present
 NEWS  4  AUG 05   New pricing for EUROPATFULL and PCTFULL effective
                   August 1, 2003
 NEWS  5  AUG 13   Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS  6  AUG 18   Data available for download as a PDF in RDISCLOSURE
 NEWS  7  AUG 18   Simultaneous left and right truncation added to PASCAL
 NEWS  8  AUG 18   FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                   Truncation
 NEWS  9  AUG 18   Simultaneous left and right truncation added to ANABSTR
 NEWS 10  SEP 22   DIPPR file reloaded
 NEWS 11  SEP 25   INPADOC: Legal Status data to be reloaded
 NEWS 12  SEP 29   DISSABS now available on STN
 NEWS 13  OCT 10   PCTFULL: Two new display fields added
 NEWS 14  OCT 21   BIOSIS file reloaded and enhanced

 NEWS EXPRESS  OCTOBER 01 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:37:13 ON 27 OCT 2003

=> file medline, uspatful, dgene, embase, wpids, fsta, jicst, biosis, biobusiness
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'MEDLINE' ENTERED AT 12:37:37 ON 27 OCT 2003

FILE 'USPATFULL' ENTERED AT 12:37:37 ON 27 OCT 2003
```

```
Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:ssspta1653hxp

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09   CA/CAplus records now contain indexing from 1907 to the
                   present
 NEWS  4  AUG 05   New pricing for EUROPATFULL and PCTFULL effective
                   August 1, 2003
 NEWS  5  AUG 13   Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS  6  AUG 18   Data available for download as a PDF in RDISCLOSURE
 NEWS  7  AUG 18   Simultaneous left and right truncation added to PASCAL
 NEWS  8  AUG 18   FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                   Truncation
 NEWS  9  AUG 18   Simultaneous left and right truncation added to ANABSTR
 NEWS 10  SEP 22   DIPPR file reloaded
 NEWS 11  SEP 25   INPADOC: Legal Status data to be reloaded
 NEWS 12  SEP 29   DISSABS now available on STN
 NEWS 13  OCT 10   PCTFULL: Two new display fields added
 NEWS 14  OCT 21   BIOSIS file reloaded and enhanced

 NEWS EXPRESS  OCTOBER 01 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:59:28 ON 27 OCT 2003

=> file medline, uspatful, dgene, embase, wpids, fsta, biosis,
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'MEDLINE' ENTERED AT 12:59:46 ON 27 OCT 2003

FILE 'USPATFULL' ENTERED AT 12:59:46 ON 27 OCT 2003
```

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 12:59:46 ON 27 OCT 2003
COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'EMBASE' ENTERED AT 12:59:46 ON 27 OCT 2003
COPYRIGHT (C) 2003 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 12:59:46 ON 27 OCT 2003
COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'FSTA' ENTERED AT 12:59:46 ON 27 OCT 2003
COPYRIGHT (C) 2003 International Food Information Service

FILE 'BIOSIS' ENTERED AT 12:59:46 ON 27 OCT 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

=> e ballance, d/au
E1 1 BALLANCE WILLIAM A JR/AU
E2 5 BALLANCE X/AU
E3 0 --> BALLANCE, D/AU
E4 1 BALLANCIEN B/AU
E5 21 BALLANCO G A/AU
E6 4 BALLANCO GERARD A/AU
E7 1 BALLANCO JULIUS/AU
E8 1 BALLANCO M F/AU
E9 1 BALLANCO MICHAEL F/AU
E10 1 BALLAND/AU
E11 58 BALLAND A/AU
E12 6 BALLAND ALAIN/AU

=> e sleep,d/au
E1 6 SLEEP TAMSIN J/AU
E2 1 SLEEP W/AU
E3 0 --> SLEEP,D/AU
E4 3 SLEEPER A A/AU
E5 1 SLEEPER A B/AU
E6 7 SLEEPER A M/AU
E7 1 SLEEPER AMANDA A/AU
E8 1 SLEEPER B/AU
E9 10 SLEEPER B P/AU
E10 5 SLEEPER C A/AU
E11 2 SLEEPER D A/AU
E12 1 SLEEPER DAVID ALLEN/AU

=> e prior,c/au
E1 2 PRIOR YVONNE/AU
E2 1 PRIOR ZAK G R/AU
E3 0 --> PRIOR,C/AU
E4 15 PRIORA C/AU
E5 1 PRIORA FABIO/AU
E6 1 PRIORA GIUSEPPE/AU
E7 2 PRIORA P/AU
E8 25 PRIORA P M/AU
E9 1 PRIORA RITA/AU
E10 1 PRIORA S A/AU
E11 5 PRIORA U/AU
E12 1 PRIORDE CASTRO C/AU

=> e sadeghi,h/au
E1 8 SADEGHI ZADEH M/AU
E2 2 SADEGHI ZADEH MAJID/AU
E3 0 --> SADEGHI,H/AU
E4 2 SADEGHIAN A/AU

E5	1	SADEGHIAN ALI/AU
E6	13	SADEGHIAN E/AU
E7	5	SADEGHIAN H/AU
E8	2	SADEGHIAN HAMID/AU
E9	32	SADEGHIAN K/AU
E10	1	SADEGHIAN K S/AU
E11	2	SADEGHIAN KEN/AU
E12	8	SADEGHIAN KENNETH/AU

AB Nucleic acid encoding a functional HTLV-III/LAV (HIV-1) protein having trans-activating ability, and expression vectors comprising this nucleic acid are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:104629 USPATFULL
TITLE: Nucleic acid encoding HIV-1 tat protein
INVENTOR(S): **Haseltine, William Alan**, Cambridge, MA, United States
Rosen, Craig A., Brookline, MA, United States
Sodroski, Joseph Gerald, Cambridge, MA, United States
Wong-Staal, Flossie, San Diego, CA, United States
Arya, Suresh K., Gaithersburg, MD, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)
The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5801056		19980901
APPLICATION INFO.:	US 1993-131898		19931005 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1992-869053, filed on 14 Apr 1992, now abandoned And a continuation-in-part of Ser. No. US 1988-172152, filed on 23 Mar 1988, now abandoned which is a continuation-in-part of Ser. No. US 1985-780925, filed on 27 Sep 1985, now abandoned , said Ser. No. US -869053 which is a continuation of Ser. No. US 1990-604607, filed on 26 Oct 1990, now abandoned which is a division of Ser. No. US 1985-806263, filed on 6 Dec 1985, now patented, Pat. No. US 4981790

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1985-482374	19850524

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fleisher, Mindy
ASSISTANT EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein, Roberts & Cushman, LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 855
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 2 USPATFULL on STN
TI Assay methods for tat cell lines
AB Assays screened for compounds that inhibit tat transactivation of the HIV (HTLV-III) LTR are taught. The assay involves tranfecting a cell line containing the tat gene by a vector containing a gene under the control of an HIV-1 LTR, adding the compound to be screened and determining the effect of the compound by looking at the effect of tat as measured by the expression of the gene under the control of the HIV LTR.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:104559 USPATFULL
TITLE: Assay methods for tat cell lines
INVENTOR(S): **Haseltine, William Alan**, Cambridge, MA, United States
Rosen, Craig A., Brookline, MA, United States

	Sodroski, Joseph Gerald, Cambridge, MA, United States Goh, Wei Chun, Somerville, MA, United States
PATENT ASSIGNEE(S):	Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5800986		19980901
APPLICATION INFO.:	US 1995-456346		19950601 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-213368, filed on 14 Mar 1994, now abandoned which is a continuation of Ser. No. US 1992-869053, filed on 14 Apr 1992, now abandoned which is a continuation of Ser. No. US 1990-604607, filed on 26 Oct 1990, now abandoned which is a division of Ser. No. US 1985-806263, filed on 6 Dec 1985, now patented, Pat. No. US 4981790 which is a continuation-in-part of Ser. No. US 1984-614297, filed on 25 May 1984, now patented, Pat. No. US 4738922

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1985-432374	19850524
	WO 1985-US985	19850524

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Elliott, George C.
ASSISTANT EXAMINER:	McKelvey, Terry A.
LEGAL REPRESENTATIVE:	Conlin, David C., Eisenstein, Ronald I.Dike, Bronstein, Roberts & Cushman, LLP
NUMBER OF CLAIMS:	8
EXEMPLARY CLAIM:	8
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT:	871

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
=> dhis
DHIS IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d his

     (FILE 'HOME' ENTERED AT 12:37:13 ON 27 OCT 2003)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS,
     BIOSIS, BIOBUSINESS' ENTERED AT 12:37:37 ON 27 OCT 2003
                E ROSEN, C/AU
                E HASELTINE, W/AU
L1             2 S E2
L2            78 S E1
L3             4 S FUSION ALBUMIN PROTEIN

=> s l2 and l3
L4             0 L2 AND L3

=> d l3 ti abs ibib tot

L3   ANSWER 1 OF 4  USPATFULL on STN
TI     Compositions and methods for the therapy and diagnosis of colon cancer
AB     Compositions and methods for the therapy and diagnosis of cancer,
       particularly colon cancer, are disclosed. Illustrative compositions
       comprise one or more colon tumor polypeptides, immunogenic portions
```

thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:237907 USPATFULL
TITLE:	Compositions and methods for the therapy and diagnosis of colon cancer
INVENTOR(S):	King, Gordon E., Shoreline, WA, UNITED STATES Meagher, Madeleine Joy, Seattle, WA, UNITED STATES Xu, Jiangchun, Bellevue, WA, UNITED STATES Secrist, Heather, Seattle, WA, UNITED STATES Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S):	Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003166064	A1	20030904
APPLICATION INFO.:	US 2002-99926	A1	20020314 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302051P	20010629 (60)
	US 2001-279763P	20010328 (60)
	US 2000-223283P	20000803 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS:	17
EXEMPLARY CLAIM:	1
LINE COUNT:	8531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 4 USPATFULL on STN

TI Compositions and methods for the therapy and diagnosis of pancreatic cancer

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:106233 USPATFULL
TITLE:	Compositions and methods for the therapy and diagnosis of pancreatic cancer
INVENTOR(S):	Benson, Darin R., Seattle, WA, UNITED STATES Kalos, Michael D., Seattle, WA, UNITED STATES Lodes, Michael J., Seattle, WA, UNITED STATES Persing, David H., Redmond, WA, UNITED STATES Hepler, William T., Seattle, WA, UNITED STATES Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S):	Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003073144	A1	20030417
APPLICATION INFO.:	US 2002-60036	A1	20020130 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-333626P	20011127 (60)
	US 2001-305484P	20010712 (60)
	US 2001-265305P	20010130 (60)
	US 2001-267568P	20010209 (60)
	US 2001-313999P	20010820 (60)
	US 2001-291631P	20010516 (60)
	US 2001-287112P	20010428 (60)
	US 2001-278651P	20010321 (60)
	US 2001-265682P	20010131 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 14253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 4 USPATFULL on STN
TI Compositions and methods for the therapy and diagnosis of colon cancer
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:272801 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of colon cancer
INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002150922	A1	20021017
APPLICATION INFO.:	US 2001-998598	A1	20011116 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304037P	20010710 (60)
	US 2001-279670P	20010328 (60)
	US 2001-267011P	20010206 (60)
	US 2000-252222P	20001120 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1
LINE COUNT: 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 4 USPATFULL on STN
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:243051 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of ovarian cancer
INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002132237	A1	20020919
APPLICATION INFO.:	US 2001-867701	A1	20010529 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-207484P	20000526 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s l2 and albumin protein
L5 1 L2 AND ALBUMIN PROTEIN

=> d l5 ti abs ibib tot

L5 ANSWER 1 OF 1 USPATFULL on STN
TI Albumin fusion proteins
AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:181414 USPATFULL
TITLE: Albumin fusion proteins

INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES **Haseltine, William A.**, Washington, DC, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003125247	A1	20030703	
APPLICATION INFO.:	US 2001-833041	A1	20010412	(9)
	NUMBER		DATE	
PRIORITY INFORMATION:	US 2000-256931P		20001221	(60)
	US 2000-199384P		20000425	(60)
	US 2000-229358P		20000412	(60)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850			
NUMBER OF CLAIMS:	29			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	20 Drawing Page(s)			
LINE COUNT:	15235			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 12:37:13 ON 27 OCT 2003)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS, BIOSIS, BIOBUSINESS' ENTERED AT 12:37:37 ON 27 OCT 2003

```
            E ROSEN, C/AU
            E HASELTINE, W/AU
L1          2 S E2
L2         78 S E1
L3          4 S FUSION ALBUMIN PROTEIN
L4          0 S L2 AND L3
L5          1 S L2 AND ALBUMIN PROTEIN
```

=> d l2 ti abs ibib tot

L2 ANSWER 1 OF 78 USPATFULL on STN

TI Human DNA mismatch repair proteins

AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:228227 USPATFULL
TITLE:	Human DNA mismatch repair proteins
INVENTOR(S):	**Haseltine, William A.**, Washington, DC, United States Ruben, Steven M., Brookeville, MD, United States Wei, Ying-Fei, Berkeley, CA, United States Adams, Mark D., Rockville, MD, United States Fleischmann, Robert D., Gaithersburg, MD, United States Fraser, Claire M., Potomac, MD, United States Fuldner, Rebecca A., Barnesville, MD, United States Kirkness, Ewen F., Olney, MD, United States

Rosen, Craig A., Laytonsville, MD, United States
Vogelstein, Bert, Baltimore, MD, United States
Kinzler, Kenneth W., Bel Air, MD, United States
Nicolaides, Nicholas C., Boothwyn, PA, United States
Papadopoulos, Nickolas, Brookline, MA, United States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6610477	B1	20030826
APPLICATION INFO.:	US 1995-465679		19950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994, now patented, Pat. No. US 6380369 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994 Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Horlick, Kenneth R.
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 2655
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 78 USPATFULL on STN
TI Albumin fusion proteins
AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:181414 USPATFULL
TITLE: Albumin fusion proteins
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Haseltine, William A., Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003125247	A1	20030703
APPLICATION INFO.:	US 2001-833041	A1	20010412 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-256931P	20001221 (60)
	US 2000-199384P	20000425 (60)
	US 2000-229358P	20000412 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 29

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 15235
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 78 USPATFULL on STN
TI HUMAN DNA MISMATCH REPAIR PROTEIN
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:127014 USPATFULL
TITLE: HUMAN DNA MISMATCH REPAIR PROTEIN
INVENTOR(S): **HASELTINE, WILLIAM A.**, WASHINGTON, DC, UNITED STATES
RUBEN, STEVEN, OLNEY, MD, UNITED STATES
WEI, YING-FEI, DARNESTOWN, MD, UNITED STATES
ADAMS, MARK D., NORTH POTOMAC, MD, UNITED STATES
FLEISCHMANN, ROBERT D., WASHINGTON, DC, UNITED STATES
FRASER, CLAIRE M., QUEENSTOWN, MD, UNITED STATES
ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES
FULDNER, REBECCA A., BARNESVILLE, MD, UNITED STATES
KIRKNESS, EWEN F., WASHINGTON, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003087226	A1	20030508
	US 6620619	B2	20030916
APPLICATION INFO.:	US 1994-210143	A1	19940316 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, GRANTED, Pat. No. US 6482606
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1017
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 4 OF 78 USPATFULL on STN
TI Human DNA mismatch repair proteins
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a prodeudre for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:37532 USPATFULL
TITLE: Human DNA mismatch repair proteins
INVENTOR(S): **Has ltine, William A.**, Washington, DC, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Wei, Ying-Fei, Berkeley, CA, UNITED STATES
Adams, Mark D., Rockville, MD, UNITED STATES

Fleischmann, Robert D., Gaithersburg, MD, UNITED STATES
Fraser, Claire M., Potomac, MD, UNITED STATES
Fuldner, Rebecca A., Barnesville, MD, UNITED STATES
Kirkness, Ewen F., Olney, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003027177	A1	20030206
APPLICATION INFO.:	US 2002-79429	A1	20020222 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-468024, filed on 6 Jun 1995, PENDING Continuation-in-part of Ser. No. WO 1995-US1035, filed on 25 Jan 1995, UNKNOWN Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994, GRANTED, Pat. No. US 6380369 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Division of Ser. No. US 1995-465679, filed on 6 Jun 1995, PENDING Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994, GRANTED, Pat. No. US 6380369 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994, GRANTED, Pat. No. US 6380369 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Page(s)
LINE COUNT: 2724
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 5 OF 78 USPATFULL on STN
TI Human DNA mismatch repair polynucleotides
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:303858 USPATFULL
TITLE: Human DNA mismatch repair polynucleotides
INVENTOR(S): Adams, Mark D., North Potomac, MD, United States
Fleischmann, Robert D., Washington, DC, United States
Fraser, Claire M., Queenstown, MD, United States
Fuldner, Rebecca A., Barnesville, MD, United States
Kirkness, Ewen F., Washington, DC, United States
Haseltine, William A., Washington, DC, United

States
Rosen, Craig A., Laytonsville, MD, United States
Ruben, Steve, Olney, MD, United States
Wei, Ying-Fei, Darnestown, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6482606	B1	20021119
APPLICATION INFO.:	US 1994-187757		19940127 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: McKelvey, Terry
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1290
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 78 USPATFULL on STN
TI Human DNA Ligase IV
AB A human DNA Ligase IV polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase IV. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase IV genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:246554 USPATFULL
TITLE: Human DNA Ligase IV
INVENTOR(S): Wei, Ying-Fei, Darnestown, MD, United States
Haseltine, William A., Washington, DC, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6455274	B1	20020924
APPLICATION INFO.:	US 1995-461562		19950605 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1994-US12922, filed on 8 Nov 1994
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Pak, Michael
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT: 1792
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 7 OF 78 USPATFULL on STN
TI Human DNA Ligase IV
AB A human DNA Ligase IV polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase IV. Antagonists against

such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase IV genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:243145 USPATFULL
TITLE:	Human DNA Ligase IV
INVENTOR(S):	Wei, Ying-Fei, Berkeley, CA, UNITED STATES **Haseltine, William A.**, Washington, DC, UNITED STATES
PATENT ASSIGNEE(S):	Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002132331	A1	20020919
APPLICATION INFO.:	US 2002-141132	A1	20020509 (10)

RELATED APPLN. INFO.:	Division of Ser. No. US 1995-461562, filed on 5 Jun 1995, PENDING Continuation-in-part of Ser. No. WO 1994-US12922, filed on 8 Nov 1994, UNKNOWN
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	15 Drawing Page(s)
LINE COUNT:	1669

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 78 USPATFULL on STN

TI Human genes, sequences and expression products-16

AB A DNA sequence of SEQ ID NOS:1-12483. An isolated DNA sequence containing the coding region of a human gene and a DNA sequence identified in SEQ ID NOS:1-12483. An isolated DNA sequence containing the coding region of a human gene that contains a DNA sequence present in ATCC Deposit No. 75916. A DNA sequence hybridizable with a DNA sequence of SEQ ID NOS:1-12483 and isolatable from other DNA in ATCC Deposit No. 75916. Expression vectors containing any of the above. Proteins expressed from any of the above.

ACCESSION NUMBER:	2002:206157 USPATFULL
TITLE:	Human genes, sequences and expression products-16
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Dillon, Patrick J., Gaithersburg, MD, UNITED STATES Li, Haodong, Gaithersburg, MD, UNITED STATES **Haseltine, William A.**, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002110850	A1	20020815
APPLICATION INFO.:	US 2001-783590	A1	20010215 (9)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-420856, filed on 12 Apr 1995, ABANDONED
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS:	27
EXEMPLARY CLAIM:	1
LINE COUNT:	2546

L2 ANSWER 9 OF 78 USPATFULL on STN
TI Human DNA mismatch repair proteins
AB The invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:168073 USPATFULL
TITLE:	Human DNA mismatch repair proteins
INVENTOR(S):	**Haseltine, William A.**, Washington, DC, United States Ruben, Steven M., Olney, MD, United States Wei, Ying-Fei, Darnestown, MD, United States Adams, Mark D., North Potomac, MD, United States Fleischmann, Robert D., Gaithersburg, MD, United States Fraser, Claire M., Potomac, MD, United States Fuldner, Rebecca A., Barnesville, MD, United States Kirkness, Ewen F., Olney, MD, United States Rosen, Craig A., Laytonsville, MD, United States
PATENT ASSIGNEE(S):	Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6416984	B1	20020709
APPLICATION INFO.:	US 1995-468024		19950606 (8)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1995-US1035, filed on 25 Jan 1995 Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994 Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994
DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Nashed, Nashaat T.
LEGAL REPRESENTATIVE:	Human Genome Sciences, Inc.
NUMBER OF CLAIMS:	48
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	28 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT:	2754

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 78 USPATFULL on STN
TI Human DNA mismatch repair proteins
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins which may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:95941 USPATFULL
TITLE:	Human DNA mismatch repair proteins
INVENTOR(S):	Adams, Mark D., North Potomac, MD, United States Fleischmann, Robert D., Gaithersburg, MD, United States Fraser, Claire M., Potomac, MD, United States Fuldner, Rebecca A., Barnesville, MD, United States Kirkness, Ewen F., Olney, MD, United States

Haseltine, William A., Washington, DC, United States
Rosen, Craig A., Laytonsville, MD, United States
Ruben, Steve, Olney, MD, United States
Wei, Ying-Fei, Darnestown, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6380369	B1	20020430
APPLICATION INFO.:	US 1994-294312		19940823 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994 Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Campbell, Eggerton A.
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 28 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 1500
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 78 USPATFULL on STN
TI Method of intracellular binding target molecules
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:226439 USPATFULL
TITLE: Method of intracellular binding target molecules
INVENTOR(S): Marasco, Wayne A., Wellesley, MA, United States
Haseltine, William A., Cambridge, MA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Inc., Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6329173	B1	20011211
APPLICATION INFO.:	US 2000-556111		20000421 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-287145, filed on 6 Apr 1999, now patented, Pat. No. US 6072036 Division of Ser. No. US 1995-438190, filed on 9 May 1995, now patented, Pat. No. US 5965371 Continuation of Ser. No. US 1993-45274, filed on 31 Mar 1993, now abandoned Continuation-in-part of Ser. No. US 1992-916939, filed on 17 Jul 1992, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Stucker, Jeffrey
LEGAL REPRESENTATIVE: Nixon Peabody LLP
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Figure(s); 17 Drawing Page(s)

LINE COUNT: 2470
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 78 USPATFULL on STN
TI Human DNA ligase III
AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:205585 USPATFULL
TITLE: Human DNA ligase III
INVENTOR(S): Wei, Ying-Fei, Berkeley, CA, United States
Yu, Guo-Liang, Berkeley, CA, United States
Haseltine, William A., Washington, DC, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, 20850 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001041350	A1	20011115
APPLICATION INFO.:	US 2001-879228	A1	20010613 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-54775, filed on 3 Apr 1998, GRANTED, Pat. No. US 6284504 Division of Ser. No. US 1995-464402, filed on 5 Jun 1995, GRANTED, Pat. No. US 5858705 Continuation-in-part of Ser. No. WO 1995-US3939, filed on 31 Mar 1995, UNKNOWN
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 1904
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 78 USPATFULL on STN
TI Human DNA ligase III
AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:147715 USPATFULL
TITLE: Human DNA ligase III
INVENTOR(S): Wei, Ying-Fei, Darnestown, MD, United States
Yu, Guo-Liang, Darnestown, MD, United States
Haseltine, William A., NW. Washington, DC, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6284504	B1	20010904
APPLICATION INFO.:	US 1998-54775		19980403 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-464402, filed on 5 Jun 1995, now patented, Pat. No. US 5858705
Continuation-in-part of Ser. No. WO 1995-US3939, filed on 31 Mar 1995
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Achutamurthy, Ponnathapu
ASSISTANT EXAMINER: Tung, Peter P.
LEGAL REPRESENTATIVE: Human Genome Sciences Inc.
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1458
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 78 USPATFULL on STN
TI Method of intracellular binding of target molecules
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:70964 USPATFULL
TITLE: Method of intracellular binding of target molecules
INVENTOR(S): Marasco, Wayne A., Wellesley, MA, United States
Haseltine, William A., Cambridge, MA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Inc., Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6072036		20000606
APPLICATION INFO.:	US 1999-287145		19990406 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-438190, filed on 9 May 1995, now patented, Pat. No. US 5965371 which is a continuation of Ser. No. US 1993-45274, filed on 31 Mar 1993 which is a continuation-in-part of Ser. No. US 1992-916939, filed on 17 Jul 1992
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stucker, Jeffrey
LEGAL REPRESENTATIVE: Eisenstein, Ronald I., Resnick, David S.Nixon Peabody LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Figure(s); 17 Drawing Page(s)
LINE COUNT: 2773
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 78 USPATFULL on STN
TI Vector comprising a replication competent HIV-1 provirus and a heterologous gene
AB A vector comprising an HIV segment and a heterologous gene segment,

which produces a replication competent and an infective HIV virus is disclosed. When the heterologous gene is a marker gene, the spread of the virus can be observed in both in vitro and in vivo systems. The use of this vector in establishing methods for screening anti-viral compounds is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2000:27798 USPATFULL
TITLE:	Vector comprising a replication competent HIV-1 provirus and a heterologous gene
INVENTOR(S):	**Haseltine, William A.**, Cambridge, MA, United States Terwilliger, Ernest, Boston, MA, United States
PATENT ASSIGNEE(S):	Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6033902		20000307
APPLICATION INFO.:	US 1992-987572		19921208 (7)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1988-249918, filed on 27 Sep 1988, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Railey, II, Johnny F.
LEGAL REPRESENTATIVE:	Eisenstein, Ronald I., Resnick, David S., Peabody LLP, Nixon
NUMBER OF CLAIMS:	11
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT:	737

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 16 OF 78 USPATFULL on STN

TI Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof

AB Packaging defective and packaging proficient HIV vectors are disclosed. These vectors can be used to establish HIV packaging defective cell lines, and to package desired genes. These cell lines can be used in developing a vaccine, HIV antibodies and as part of a system for gene transfer. The packaging proficient vector can be used to target HIV target cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1999:141683 USPATFULL
TITLE:	Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof
INVENTOR(S):	Sodroski, Joseph G., Medford, MA, United States **Haseltine, William A.**, Cambridge, MA, United States Poznansky, Mark, Cambridge, MA, United States Lever, Andrew, Pinner, United Kingdom
PATENT ASSIGNEE(S):	Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5981276		19991109
APPLICATION INFO.:	US 1997-915429		19970820 (8)

RELATED APPLN. INFO.:	Division of Ser. No. US 1993-152902, filed on 15 Nov 1993, now patented, Pat. No. US 5665577 which is a continuation of Ser. No. US 1992-827588, filed on 29 Jan 1992, now abandoned which is a continuation of Ser. No. US 1990-540746, filed on 20 Jun 1990, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Eisenstein, Ronald I., Resnick, David S.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 17 OF 78 USPATFULL on STN
TI Method of intracellular binding of target molecules
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:124707 USPATFULL
TITLE: Method of intracellular binding of target molecules
INVENTOR(S): Marasco, Wayne A., Wellesley, MA, United States
Haseltine, William A., Cambridge, MA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5965371		19991012
APPLICATION INFO.:	US 1995-438190		19950509 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-45274, filed on 31 Mar 1993 which is a continuation-in-part of Ser. No. US 1992-916939, filed on 17 Jul 1992, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stucker, Jeffrey
LEGAL REPRESENTATIVE: Eisenstein, Ronald I., Conlin, David G., Resnick, David S.
NUMBER OF CLAIMS: 101
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 17 Drawing Page(s)
LINE COUNT: 3086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 18 OF 78 USPATFULL on STN
TI Polynucleotides encoding human DNA ligase III and methods of using these polynucleotides
AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques are disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:4370 USPATFULL
TITLE: Polynucleotides encoding human DNA ligase III and

methods of using these polynucleotides

INVENTOR(S): Wei, Ying-Fei, Darnestown, MD, United States
Yu, Guo-Liang, Darnestown, MD, United States
Haseltine, William A., Washington, DC, United States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5858705		19990112
APPLICATION INFO.:	US 1995-464402		19950605 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Walsh, Stephen
ASSISTANT EXAMINER: Lathrop, Brian
LEGAL REPRESENTATIVE: Olstein, Elliot M., Mullins, J. G.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1615
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 19 OF 78 USPATFULL on STN
TI Immunogenic peptides, antibodies and uses thereof relating to CD4 receptor binding
AB Immunogenic peptides containing amino acid residues which define a binding site to a CD4 receptor are disclosed. Antibodies to these peptides are also disclosed. Methods of reducing the ability of a gp120 env protein to bind to CD4 are also disclosed. Methods of treatment and prophylaxis using these antibodies and peptides are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:4039 USPATFULL
TITLE: Immunogenic peptides, antibodies and uses thereof relating to CD4 receptor binding

INVENTOR(S): Sodroski, Joseph G., Medford, MA, United States
Haseltine, William A., Boston, MA, United States
Olshevsky, Udy, Remath-OAN, Israel
Helseth, Eirik, Trondheim, Norway
Furman, Craig D., Nashua, NH, United States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5858366		19990112
APPLICATION INFO.:	US 1993-135312		19931012 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-669072, filed on 14 Mar 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-524632, filed on 16 May 1990, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Smith, Lynette F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein, Roberts & Cushman, LLP
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1226
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 20 OF 78 USPATFULL on STN
TI Reactive neutralizing human anti-GP120 recombinant antibody, DNA coding the same and use thereof
AB The present invention is directed to a recombinant human monoclonal antibody which binds to a discontinuous epitope on the HIV gp120 envelope glycoprotien, blocks the binding of gp120 to the CD4 receptor, and neutralizes a broad range of HIV isolates. The present invention also provides the primary nucleotide and deduced amino acid sequences of the rearranged heavy and light chains of the recombinant monoclonal antibody of the present invention, and a method of screening for antibodies which block binding of envelope glycoprotein to the CD4 receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1998:160114 USPATFULL
TITLE:	Reactive neutralizing human anti-GP120 recombinant antibody, DNA coding the same and use thereof
INVENTOR(S):	Sodroski, Joseph G., Medford, MA, United States Marasco, Wayne A., Wellesley, MA, United States Posner, Marshall R., Dedham, MA, United States **Haseltine, William A.**, Cambridge, MA, United States
PATENT ASSIGNEE(S):	Dana-Farber Cancer Insitute, Boston, MA, United States (U.S. corporation) New England Deaconess Hospital Corp., Dedham, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5852186		19981222
APPLICATION INFO.:	US 1995-480774		19950607 (8)

RELATED APPLN. INFO.:	Division of Ser. No. US 1995-400674, filed on 8 Mar 1995, now abandoned which is a continuation of Ser. No. US 1991-804652, filed on 10 Dec 1991, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Budens, Robert D.
LEGAL REPRESENTATIVE:	Conlin, David G., Resnick, David S., Eisenstein, Ronald I.
NUMBER OF CLAIMS:	6
EXEMPLARY CLAIM:	1,2
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT:	2191

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 21 OF 78 USPATFULL on STN
TI Method of intracellular binding of target molecules
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1998:159761 USPATFULL
TITLE:	Method of intracellular binding of target molecules
INVENTOR(S):	Marasco, Wayne A., Wellesley, MA, United States **Haseltine, William A.**, Rockville, MD, United States
PATENT ASSIGNEE(S):	Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5851829		19981222	
	WO 9402610		19940203	
APPLICATION INFO.:	US 1995-373190		19950330	(8)
	WO 1993-US6735		19930716	
			19950330	PCT 371 date
			19950330	PCT 102(e) date

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stucker, Jeffrey
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I., Resnick, David S.
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT: 3209
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 22 OF 78 USPATFULL on STN
TI Immunogenic peptides, antibodies and uses thereof relating to CD4 receptor binding
AB Immunogenic peptides containing amino acid residues which define a binding site to a CD4 receptor are disclosed. Antibodies to these peptides are also disclosed. Methods of reducing the ability of a gp120 env protein to bind to CD4 are also disclosed. Methods of treatment and prophylaxis using these antibodies and peptides are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1998:122077 USPATFULL
TITLE: Immunogenic peptides, antibodies and uses thereof relating to CD4 receptor binding
INVENTOR(S): Sodroski, Joseph G., Medford, MA, United States
Haseltine, William A., Canbridge, MA, United States
Furman, Craig D., Nashua, NH, United States
Olshevsky, Udy, Remath-Oan, Israel
Helseth, Eirik, Trondheim, Norway
Wyatt, Richard, Tewksbury, MA, United States
Thali, Markus, Brookline, MA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Instistute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5817316		19981006	
APPLICATION INFO.:	US 1992-858165		19920326	(7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-669072, filed on 14 Mar 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-524632, filed on 16 May 1990, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Smith, Lynette F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein, Roberts & Cushman
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 23 OF 78 USPATFULL on STN

TI Assays for factors affecting circularization of DNA, assays for factors affecting DNA integration, factors, and uses thereof

AB An assay for factors that affect integration of DNA into target DNA is disclosed. Assays for methods of screening for factors which effect viral DNA circularization either by homologous recombination, end-to-end ligation, or autointegration, are also disclosed. A method for screening for factors which will enhance circularization rather than integration by testing cellular cytoplasmic fluid under conditions which permit circularization in the fluid is also described. Factors which effect integration and circularization are disclosed. Therapeutic methods for retarding viral infection are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:61388 USPATFULL

TITLE: Assays for factors affecting circularization of DNA, assays for factors affecting DNA integration, factors, and uses thereof

INVENTOR(S): **Haseltine, William A.**, Cambridge, MA, United States
Farnet, Christopher M., Cambridge, MA, United States

PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5759768		19980602
APPLICATION INFO.:	US 1995-425726		19950420 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-703180, filed on 17 May 1991, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Degen, Nancy

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein, Roberts & Cushman, LLP

NUMBER OF CLAIMS: 27

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 40 Drawing Figure(s); 25 Drawing Page(s)

LINE COUNT: 1672

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 24 OF 78 USPATFULL on STN

TI Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof

AB Packaging defective and packaging proficient HIV vectors are disclosed. These vectors can be used to establish HIV packaging defective cell lines, and to package desired genes. These cell lines can be used in developing a vaccine, HIV antibodies and as part of a system for gene transfer. The packaging proficient vector can be used to target HIV target cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:81129 USPATFULL

TITLE: Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof

INVENTOR(S): Sodroski, Joseph G., Medford, MA, United States
Haseltine, William A., Cambridge, MA, United States
Poznansky, Mark, Cambridge, MA, United States
Lever, Andrew, Pinner Middlesex, England
Gottlinger, Heinrich, Munich, Germany, Federal Republic of

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5665577		19970909
APPLICATION INFO.:	US 1993-152902		19931115 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-827588, filed on 29 Jan 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-540746, filed on 20 Jun 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-307664, filed on 6 Feb 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fleisher, Mindy
ASSISTANT EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 72
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1156
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 25 OF 78 USPATFULL on STN
TI Vectors expressing hybrid viruses, methods of use and novel assays
AB A vector which can be used to establish a hybrid SIV/HIV-1 virus is described. This virus can be used to infect an animal such as a monkey to establish an animal model for in vivo testing. This animal model can be used for purposes such as screening for therapeutics, adjuvants and vaccines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:68366 USPATFULL
TITLE: Vectors expressing hybrid viruses, methods of use and novel assays
INVENTOR(S): Sodroski, Joseph, Medford, MA, United States
Haseltine, William A., Cambridge, MA, United States
Letvin, Norman, Newton, MA, United States
Li, John, Boston, MA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5654195		19970805
APPLICATION INFO.:	US 1994-268799		19940701 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-887505, filed on 22 May 1992, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Guzo, David
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 1388
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 26 OF 78 USPATFULL on STN
TI YC1 gene
AB Isolated and purified YC1 genes and proteins are disclosed. The protein binds to a site in the HIV-LTR, the NRE-1 site, and can inhibit the expression of a gene operably linked to the HIV-1 LTR. The use of the protein and gene are discussed. Repressible and inducible expression systems using the YC1 gene are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:66033 USPATFULL
TITLE: YC1 gene
INVENTOR(S): Lu, Yinchen, Wellesley, MA, United States
Haseltine, William A., Cambridge, MA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5652144		19970729
APPLICATION INFO.:	US 1992-973431		19921110 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Guzo, David
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1256
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 27 OF 78 USPATFULL on STN
TI Cis-acting repression sequences, cis-acting antirepression sequences, vectors, methods of preparation and use
AB Cis-acting repression sequences which are able to provide a cis-acting inhibitory effect on the expression of a gene when placed downstream of the gene in its untranslated message are dislcosed. Cis-acting anti-repression sequences which can relieve the cis-acting repression in the presence of the art gene product are also disclosed. These sequences correspond to a sufficient number of nucleotides from the HIV-I, HIV-2, STLV-3 or HTLV-IV genomes to provide the repression or anti-repression effects. The use of the sequences in vectors and systems to control the expression of a desired gene product is also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:14591 USPATFULL
TITLE: Cis-acting repression sequences, cis-acting antirepression sequences, vectors, methods of preparation and use
INVENTOR(S): **Haseltine, William A.**, Cambridge, MA, United States
Rosen, Craig A., Glen Ridge, NJ, United States
Sodroski, Joseph G., Cambridge, MA, United States
Terwilliger, Ernest, Boston, MA, United States
Goh, Wei C., Stanford, CA, United States
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5604114		19970218
APPLICATION INFO.:	US 1993-41887		19930402 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-847854, filed on 9 Mar 1992, now abandoned which is a continuation of Ser. No. US 1990-591667, filed on 27 Sep 1990, now abandoned which is a continuation of Ser. No. US 1987-56620, filed on 29 May 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-865151, filed on 20 May 1986, now patented, Pat. No. US 4935372
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Elliott, George C.
ASSISTANT EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 1434
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 28 OF 78 USPATFULL on STN
TI H. saimiri-HTLV-X region vector
AB An H. saimiri-HTLV-1 or 2 X region vector is disclosed. This vector can be used to establish continuous cell lines of difficult to grow cells, such as human T-cells. It can also be used to obtain certain cell products and in methods for screening new compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 95:52244 USPATFULL
TITLE: H. saimiri-HTLV-X region vector
INVENTOR(S): **Haseltine, William A.**, Cambridge, MA, United States
McGuire, Kathleen, Jamaica Plain, MA, United States
Dokhelar, Marie-Christine, Paris, France
Grassmann, Ralph, Erlangen, Germany, Federal Republic of
Fleckenstein, Bernard, Weisenthau, Germany, Federal Republic of
Muller-Fleckenstein, Ingrid, Weisenthau, Germany, Federal Republic of
PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)
Behringwerke Aktiengesellschaft, Frankfurt, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5424197		19950613
APPLICATION INFO.:	US 1992-976661		19921116 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-816774, filed on 2 Jan 1992, now abandoned which is a continuation of Ser. No. US 1988-254416, filed on 6 Oct 1988, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stone, Jacqueline
ASSISTANT EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 777
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 29 OF 78 USPATFULL on STN
TI Art (rev) protein of human T-cell leukemia virus
AB A gene and gene product that regulates the expression of the capsidal envelope genes of HTLV-III/LAV and that can be used to regulate the expression of heterologous (non-viral) genes as well is disclosed. This art gene consists of two exons and can be used in creating nucleotide segments, vectors and cell lines. A new method for screening for compounds that inhibit the replication of HTLV-III is also described and comprises:

(1) transfecting a T-cell line with the HTLV-III art and env genes;

(2) thereafter, adding a preselected compound to the transformed cell line in increasing concentrations; and

(3) determining whether the compound effects the art function without being toxic to the cell.

An additional parameter to use in diagnosis of AIDS disease is also described. The use of the art gene and gene product in AIDS therapy is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	94:51511 USPATFULL
TITLE:	Art (rev) protein of human T-cell leukemia virus
INVENTOR(S):	**Haseltine, William A.**, Cambridge, MA, United States Rosen, Craig A., Brookline, MA, United States Sodroski, Joseph G., Cambridge, MA, United States Goh, Wei C., Somerville, MA, United States
PATENT ASSIGNEE(S):	Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5321124		19940614
APPLICATION INFO.:	US 1992-995948		19921218 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1990-538189, filed on 14 Jun 1990, now abandoned which is a division of Ser. No. US 1986-865151, filed on 20 May 1986, now patented, Pat. No. US 4935372		

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Low, Christopher S. F.
LEGAL REPRESENTATIVE:	Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS:	4
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT:	1062

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 30 OF 78 USPATFULL on STN

TI Sequences containing the vpu gene and vectors therefore methods of preparation and use

AB DNA segments encoding the vpu gene and a vector encoding the vpu gene are disclosed. These sequences containing the vpu gene can be used to express a protein that has antigenic determinants that can be used to screen for people having the HIV-1 virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	94:15664 USPATFULL
TITLE:	Sequences containing the vpu gene and vectors therefore methods of preparation and use
INVENTOR(S):	**Haseltine, William A.**, Cambridge, MA, United States Terwilliger, Ernest, Boston, MA, United States Cohen, Eric, Brighton, MA, United States
PATENT ASSIGNEE(S):	Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5288640		19940222
APPLICATION INFO.:	US 1991-716131		19910617 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1988-193321, filed on 12 May 1988, now patented, Pat. No. US 5043262		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Barnd, D. L.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 493
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 31 OF 78 USPATFULL on STN
TI Expression of human immunodeficiency virus (HIV) reverse transcriptase
AB This invention describes pHRT25, a plasmid containing a modified pol gene of the Human Immunodeficiency Virus Type 1 (HIV-1), formerly HTLV-III, under control of an inducible trp promoter. Methods of expressing reverse transcriptase activity using pHRT25 in E. coli are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 93:89562 USPATFULL
TITLE: Expression of human immunodeficiency virus (HIV) reverse transcriptase
INVENTOR(S): Goff, Stephen P., Tenafly, NJ, United States
Tanese, Naoko, New York, NY, United States
Haseltine, William A., Cambridge, MA, United States
PATENT ASSIGNEE(S): The Trustees of Columbia University in the City of New York, New York, NY, United States (U.S. corporation)
The Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5256554		19931026
APPLICATION INFO.:	US 1991-800682		19911202 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1990-552848, filed on 12 Jul 1990, now abandoned which is a continuation of Ser. No. US 1986-865156, filed on 20 May 1986, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Railey II, Johnny F.
LEGAL REPRESENTATIVE: White, John P.
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 462
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 32 OF 78 USPATFULL on STN
TI Gene expressing VPT protein and vectors expressing this protein
AB Viral protein T from Human Immunodeficiency Virus Type 1 (HIV-1) is disclosed. The protein has a molecular weight of approximately 17 kD and is produced by the vpt gene of HIV-1. This protein is antigenic. Vectors capable of expressing the vpt protein are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 93:31326 USPATFULL
TITLE: Gene expressing VPT protein and vectors expressing this protein
INVENTOR(S): **Haseltine, William A.**, Cambridge, MA, United States
Cohen, Eric, Brighton, MA, United States

PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5204258		19930420
APPLICATION INFO.:	US 1989-360847		19890602 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 473
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 33 OF 78 USPATFULL on STN
TI Protein, sequences containing the VPU gene therefore, vectors, methods of preparation and use
AB A protein having molecular weight of approximately 16 kD which is also cleaved into a protein having a molecular weight of 15 kD is disclosed. This protein is referred to as viral protein U and produced by the vpu gene. It is disclosed that this protein has antigenic determinants and can be used to screen for people having the HIV-1 virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 91:68814 USPATFULL
TITLE: Protein, sequences containing the VPU gene therefore, vectors, methods of preparation and use
INVENTOR(S): **Haseltine, William A.**, Cambridge, MA, United States
Terwilliger, Ernest, Boston, MA, United States
Cohen, Eric, Brighton, MA, United States
PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5043262		19910827
APPLICATION INFO.:	US 1988-193321		19880512 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schain, Howard E.
ASSISTANT EXAMINER: Baker, K. Keith
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 520
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 34 OF 78 USPATFULL on STN
TI Stable TatIII cell lines, TatIII gene products, and assay methods
AB This invention describes stable tat.sub.III cell lines. It is disclosed that by transfecting a preselected tat.sub.III cell line with a vector containing a sufficient amount of the HTLV-III LTR responsive to tat.sub.III gene products for trans-activation and an enhancer upstream of the tat.sub.III responsive segment, it is possible to express high levels of the tat.sub.III gene products. By including a preselected heterologous gene on this vector, it is also possible to express high levels of a desired gene product. A substantially pure protein comprising 86 amino acids and having an apparent molecular weight of

about 14,000 dalton and exhibiting trans-activating activity is also disclosed. This protein and polypeptides having trans-activating ability, which is also disclosed, can be used to produce high levels of a desired gene product. A method of detecting the presence of HTLV-III/LAV virus in an individual is also disclosed and comprises the step of:

(a) incubating whole blood or lymphocytes from the invididual to be tested with tat.sub.III cell lines of the present invention in a culture medium; and

(b) screening for cytopathic effects on the cells is also disclosed. A method of screening for a compound that inhibits trans-activation of the tat.sub.III gene product is also disclosed and comprises the steps of:

(1) transacting a tat.sub.III cell line of the present invention with a vector containing a gene that expresses a selectable marker and whose expression is under the control of an HTLV-III LTR;

(2) transfecting the same type of tat.sub.III cell lines as in step (1) with the selectable gene chosen in step (1) but under the control of a different regulatory sequence;

(3) thereafter, adding a preselected compound to each of the cell lines in increasing concentrations; and

(4) measuring the expression of the selectable gene product to determine whether the compound effects the tat.sub.III function without being toxic to the cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	91:1087 USPATFULL
TITLE:	Stable TatIII cell lines, TatIII gene products, and assay methods
INVENTOR(S):	**Haseltine, William A.**, Cambridge, MA, United States Rosen, Craig A., Brookline, MA, United States Sodroski, Joseph G., Cambridge, MA, United States Goh, Wei C., Somerville, MA, United States
PATENT ASSIGNEE(S):	Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4981790		19910101
APPLICATION INFO.:	US 1985-806263		19851206 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1984-614297, filed on 25 May 1984		

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1985-482374	19850524
	WO 1985-US985	19850524

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Teskin, Robin L.
ASSISTANT EXAMINER:	Burrous, Beth A.
LEGAL REPRESENTATIVE:	Conlin, David G., Eisenstein, Ronald I.
NUMBER OF CLAIMS:	16
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT:	847

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 35 OF 78 USPATFULL on STN
TI Peptides for the diagnosis of HTLV-III antibodies, their preparation and use
AB Certain peptide fragments of the human T-cell leukemia (lymphotropic) virus (HTLV-III) are particularly immunoreactive to HTLV-III antibodies, and can therefore be applied to immunodiagnostic tests for the detection of antibodies to HTLV-III.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	88:40574 USPATFULL
TITLE:	Peptides for the diagnosis of HTLV-III antibodies, their preparation and use
INVENTOR(S):	Beltz, Gerald A., Lexington, MA, United States Thorn, Richard M., Milford, MA, United States Marciani, Dante J., Hopkinton, MA, United States Hung, Chung-Ho, Milford, MA, United States **Haseltine, William A.**, Cambridge, MA, United States
PATENT ASSIGNEE(S):	Cambridge Bioscience Corporation, Hopkinton, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4753873		19880628
APPLICATION INFO.:	US 1986-825597		19860203 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1985-819917, filed on 6 Nov 1985		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nucker, Christine M.		
LEGAL REPRESENTATIVE:	Saidman, Sterne, Kessler & Goldstein		
NUMBER OF CLAIMS:	17		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	21 Drawing Figure(s); 22 Drawing Page(s)		
LINE COUNT:	1122		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 36 OF 78 USPATFULL on STN
TI Trans-acting transcriptional factors
AB This invention describes the discovery of a novel phenomena in retrovirus transcription, namely transcriptional trans-activation. Described herein are novel trans-acting factors which may be employed to enhance the production of heterologous genes. Described is a novel trans-acting directing gene, designated herein as the "luk" gene and the 35,000 to 45,000, more specifically about 42,000 dalton molecular weight protein encoded thereby.

The present invention demonstrates the LTR elements of HTLV can function as transcriptional promoters for heterologous genes on both unintegrated and integrated DNA. In general, the HTLV-1 LTR is a stronger promoter than is the HLTV-II LTR in its requirements for cellular and/or viral trans-acting factors in order to function efficiently. HTLV infection results in the production of trans-acting factors that dramatically increase the rate of HTLV LTR-promoted transcription.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	88:24366 USPATFULL
TITLE:	Trans-acting transcriptional factors
INVENTOR(S):	**Haseltine, William A.**, Cambridge, MA, United States Sodrowski, Joseph G., Cambridge, MA, United States Rosen, Craig A., Brookline, MA, United States
PATENT ASSIGNEE(S):	Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4738922		19880419
APPLICATION INFO.:	US 1984-614297		19840525 (6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Seidman, S.
LEGAL REPRESENTATIVE: Conlin, David G., Linek, Ernest V., Eisenstein, Ronald I.
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 767
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 37 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA mismatch repair protein.
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.
ACCESSION NUMBER: 2003:484626 BIOSIS
DOCUMENT NUMBER: PREV200300484626
TITLE: Human DNA mismatch repair protein.
AUTHOR(S): **Haseltine, William A.** [Inventor, Reprint Author]; Ruben, Steven [Inventor]; Wei, Ying-Fei [Inventor]; Adams, Mark D. [Inventor]; Fleischmann, Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Rosen, Craig A. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]
CORPORATE SOURCE: ASSIGNEE: Human Genome Sciences, Inc.
PATENT INFORMATION: US 6620619 September 16, 2003
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Sep 16 2003) Vol. 1274, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Oct 2003
Last Updated on STN: 15 Oct 2003

L2 ANSWER 38 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA mismatch repair proteins.
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.
ACCESSION NUMBER: 2003:435948 BIOSIS
DOCUMENT NUMBER: PREV200300435948
TITLE: Human DNA mismatch repair proteins.
AUTHOR(S): **Haseltine, William A.** [Inventor, Reprint Author]; Ruben, Steven M. [Inventor]; Wei, Ying-Fei [Inventor]; Adams, Mark D. [Inventor]; Fleischmann, Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; Rosen, Craig A. [Inventor]; Vogelstein, Bert [Inventor]; Kinzler, Kenneth W. [Inventor]; Nicolaides, Nicholas C. [Inventor];

Papadopoulos, Nickolas [Inventor]
CORPORATE SOURCE: Brookeville, MD, USA
ASSIGNEE: Human Genome Sciences, Inc.; The Johns Hopkins University
PATENT INFORMATION: US 6610477 August 26, 2003
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 26, 2003) Vol. 1273, No. 4. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 17 Sep 2003
Last Updated on STN: 17 Sep 2003

L2 ANSWER 39 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA mismatch repair polynucleotides.
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.
ACCESSION NUMBER: 2003:53897 BIOSIS
DOCUMENT NUMBER: PREV200300053897
TITLE: Human DNA mismatch repair polynucleotides.
AUTHOR(S): Adams, Mark D. [Inventor, Reprint Author]; Fleischmann, Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; **Haseltine, William A.** [Inventor]; Rosen, Craig A. [Inventor]; Ruben, Steve [Inventor]; Wei, Ying-Fei [Inventor]
CORPORATE SOURCE: Queenstown, MD, USA
ASSIGNEE: Human Genome Sciences, Inc.
PATENT INFORMATION: US 6482606 November 19, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Nov. 19, 2002) Vol. 1264, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Jan 2003
Last Updated on STN: 22 Jan 2003

L2 ANSWER 40 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA Ligase IV.
AB A human DNA Ligase IV polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase IV. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase IV genes are also disclosed.
ACCESSION NUMBER: 2002:584537 BIOSIS
DOCUMENT NUMBER: PREV200200584537
TITLE: Human DNA Ligase IV.
AUTHOR(S): Wei, Ying-Fei [Inventor]; **Haseltine, William A.** [Inventor]
CORPORATE SOURCE: ASSIGNEE: Human Genome Sciences, Inc.
PATENT INFORMATION: US 6455274 September 24, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Sep. 24, 2002) Vol. 1262, No. 4. http://www.uspto.gov/web/menu/patdata.html. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent

LANGUAGE: English
ENTRY DATE: Entered STN: 13 Nov 2002
Last Updated on STN: 13 Nov 2002

L2 ANSWER 41 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA mismatch repair proteins.
AB The invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.
ACCESSION NUMBER: 2002:447022 BIOSIS
DOCUMENT NUMBER: PREV200200447022
TITLE: Human DNA mismatch repair proteins.
AUTHOR(S): **Haseltine, William A.** [Inventor, Reprint author]; Ruben, Steven M. [Inventor]; Wei, Ying-Fei [Inventor]; Adams, Mark D. [Inventor]; Fleischmann, Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; Rosen, Craig A. [Inventor]
CORPORATE SOURCE: Washington, DC, USA
ASSIGNEE: Human Genome Sciences, Inc.
PATENT INFORMATION: US 6416984 July 09, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (July 9, 2002) Vol. 1260, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 21 Aug 2002
Last Updated on STN: 21 Aug 2002

L2 ANSWER 42 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA mismatch repair proteins.
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins which may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.
ACCESSION NUMBER: 2002:308881 BIOSIS
DOCUMENT NUMBER: PREV200200308881
TITLE: Human DNA mismatch repair proteins.
AUTHOR(S): Adams, Mark D. [Inventor, Reprint author]; Fleischmann, Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; **Haseltine, William A.** [Inventor]; Rosen, Craig A. [Inventor]; Ruben, Steve [Inventor]; Wei, Ying-Fei [Inventor]
CORPORATE SOURCE: North Potomac, MD, USA
ASSIGNEE: Human Genome Sciences, Inc.
PATENT INFORMATION: US 6380369 April 30, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Apr. 30, 2002) Vol. 1257, No. 5. http://www.uspto.gov/web/menu/patdata.html. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 22 May 2002
Last Updated on STN: 22 May 2002

L2 ANSWER 43 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Method of intracellular binding target molecules.
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.
ACCESSION NUMBER: 2002:113837 BIOSIS
DOCUMENT NUMBER: PREV200200113837
TITLE: Method of intracellular binding target molecules.
AUTHOR(S): Marasco, Wayne A. [Inventor]; **Haseltine, William A.** [Inventor]
CORPORATE SOURCE: ASSIGNEE: Dana-Farber Cancer Institute, Inc.
PATENT INFORMATION: US 6329173 December 11, 2001
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Dec. 11, 2001) Vol. 1253, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 30 Jan 2002
Last Updated on STN: 26 Feb 2002

L2 ANSWER 44 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Beyond chicken soup.
ACCESSION NUMBER: 2001:563884 BIOSIS
DOCUMENT NUMBER: PREV200100563884
TITLE: Beyond chicken soup.
AUTHOR(S): **Haseltine, William A.**
SOURCE: Scientific American, (November, 2001) Vol. 285, No. 5, pp. 56-63. print. CODEN: SCAMAC. ISSN: 0036-8733.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Dec 2001
Last Updated on STN: 25 Feb 2002

L2 ANSWER 45 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Human DNA ligase III.
AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.
ACCESSION NUMBER: 2001:519311 BIOSIS
DOCUMENT NUMBER: PREV200100519311
TITLE: Human DNA ligase III.
AUTHOR(S): Wei, Ying-Fei [Inventor]; Yu, Guo-Liang [Inventor]; **Haseltine, William A.** [Inventor, Reprint author]
CORPORATE SOURCE: NW. Washington, DC, USA
ASSIGNEE: Human Genome Sciences, Inc.
PATENT INFORMATION: US 6284504 September 04, 2001
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Sep. 4, 2001) Vol. 1250, No. 1. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Nov 2001

Last Updated on STN: 23 Feb 2002

L2 ANSWER 46 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Method of intracellular binding of target molecules.
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.
ACCESSION NUMBER: 2001:70861 BIOSIS
DOCUMENT NUMBER: PREV200100070861
TITLE: Method of intracellular binding of target molecules.
AUTHOR(S): Marasco, Wayne A. [Inventor]; **Haseltine, William A.** [Inventor]
CORPORATE SOURCE: ASSIGNEE: Dana-Farber Cancer Institute, Inc.
PATENT INFORMATION: US 6072036 June 06, 2000
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (June 6, 2000) Vol. 1235, No. 1. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Feb 2001
Last Updated on STN: 12 Feb 2002

L2 ANSWER 47 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Vector comprising a replication competent HIV-1 provirus and a heterologous gene.
AB A vector comprising an HIV segment and a heterologous gene segment, which produces a replication competent and an infective HIV virus is disclosed. When the heterologous gene is a marker gene, the spread of the virus can be observed in both in vitro and in vivo systems. The use of this vector in establishing methods for screening anti-viral compounds is also disclosed.
ACCESSION NUMBER: 2000:398269 BIOSIS
DOCUMENT NUMBER: PREV200000398269
TITLE: Vector comprising a replication competent HIV-1 provirus and a heterologous gene.
AUTHOR(S): **Haseltine, William A.** [Inventor, Reprint author]; Terwilliger, Ernest [Inventor]
CORPORATE SOURCE: Cambridge, MA, USA
ASSIGNEE: Dana-Farber Cancer Institute
PATENT INFORMATION: US 6033902 March 07, 2000
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Mar. 7, 2000) Vol. 1232, No. 1. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 20 Sep 2000
Last Updated on STN: 8 Jan 2002

L2 ANSWER 48 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof.
AB Packaging defective and packaging proficient HIV vectors are disclosed. These vectors can be used to establish HIV packaging defective cell lines, and to package desired genes. These cell lines can be used in developing a vaccine, HIV antibodies and as part of a system for gene transfer. The packaging proficient vector can be used to target HIV target cells.
ACCESSION NUMBER: 2000:294930 BIOSIS
DOCUMENT NUMBER: PREV200000294930

TITLE: Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof.
AUTHOR(S): Sodroski, Joseph G. [Inventor, Reprint author]; **Haseltine, William A.** [Inventor]; Poznansky, Mark [Inventor]; Lever, Andrew [Inventor]
CORPORATE SOURCE: Pinner, UK
ASSIGNEE: Dana-Farber Cancer Institute, Boston, MA, USA
PATENT INFORMATION: US 5981276 November 09, 1999
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Nov. 9, 1999) Vol. 1228, No. 2. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Jul 2000
Last Updated on STN: 7 Jan 2002

L2 ANSWER 49 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Method of intracellular binding of target molecules.
AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.
ACCESSION NUMBER: 2000:287930 BIOSIS
DOCUMENT NUMBER: PREV200000287930
TITLE: Method of intracellular binding of target molecules.
AUTHOR(S): Marasco, Wayne A. [Inventor, Reprint author]; **Haseltine, William A.** [Inventor]
CORPORATE SOURCE: Cambridge, MA, USA
ASSIGNEE: Dana-Farber Cancer Institute, Boston, MA, USA
PATENT INFORMATION: US 5965371 October 12, 1999
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 12, 1999) Vol. 1227, No. 2. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Jul 2000
Last Updated on STN: 7 Jan 2002

L2 ANSWER 50 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Discovering genes for new medicines.
ACCESSION NUMBER: 1997:156571 BIOSIS
DOCUMENT NUMBER: PREV199799455774
TITLE: Discovering genes for new medicines.
AUTHOR(S): **Haseltine, William A.**
CORPORATE SOURCE: Human Genome Sci., Rockville, MD, USA
SOURCE: Scientific American, (1997) Vol. 276, No. 3, pp. 92-97. CODEN: SCAMAC. ISSN: 0036-8733.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Apr 1997
Last Updated on STN: 15 Apr 1997

L2 ANSWER 51 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI The application of genomics to the creation of new pharmaceutical products.
ACCESSION NUMBER: 1996:148685 BIOSIS
DOCUMENT NUMBER: PREV199698720820
TITLE: The application of genomics to the creation of new pharmaceutical products.

AUTHOR(S): **Haseltine, William A.**
CORPORATE SOURCE: Human Genome Sci., 9410 Key West Ave., Rockville, MD 20850, USA
SOURCE: AAAS Annual Meeting and Science Innovation Exposition, (1996) Vol. 162, No. 0, pp. A2.
Meeting Info.: 1996 AAAS Annual Meeting and Science Innovation Exposition: The 162nd National Meeting of the American Association for the Advancement of Science. Baltimore, Maryland, USA. February 8-13, 1996.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 3 Apr 1996
Last Updated on STN: 26 Apr 1996

L2 ANSWER 52 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Animal model for the therapy of acquired immunodeficiency syndrome with reverse transcriptase inhibitors.
AB The reverse transcriptase (RT) of the human immunodeficiency virus type 1 (HIV-1) is the major target for antiretroviral therapy of the acquired immunodeficiency syndrome (AIDS). While some inhibitors exhibit activity against most retroviral RTs, others are specific for the HIV-1 enzyme. To develop an animal model for the therapy of the HIV-1 infection with RT inhibitors, the RT of the simian immunodeficiency virus (SIV) was replaced by the RT of HIV-1. Macaques infected with this SIV/HIV-1 hybrid virus developed AIDS-like symptoms and pathology. The HIV-1-specific RT inhibitor LY300046 cntdot HCl, but not zidovudine (3'-azido-3'-deoxythymidine (AZT)) delayed the appearance of plasma antigenemia in macaques infected with a high dose of the chimeric virus. Infection of macaques with the chimeric virus seems to be a valuable model to study the in vivo efficacy of new RT inhibitors, the emergence and reversal of drug resistance, the therapy of infections with drug-resistant viruses, and the efficacy of combination therapy.
ACCESSION NUMBER: 1995:480998 BIOSIS
DOCUMENT NUMBER: PREV199598495298
TITLE: Animal model for the therapy of acquired immunodeficiency syndrome with reverse transcriptase inhibitors.
AUTHOR(S): Ueberla, Klaus [Reprint author]; Stahl-Hennig, Christiane; Boettiger, Disa; Maetz-Rensing, Kerstin; Kaup, Franz J.; Li, John; **Haseltine, William A.**; Fleckenstein, Bernhard; Hunsmann, Gerhard; Oeberg, Bo; Sodroski, Joseph
CORPORATE SOURCE: Inst. Virol., Univ. Erlangen-Nuernberg, Schlossgarten 4, D-91054 Erlangen, Germany
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1995) Vol. 92, No. 18, pp. 8210-8214.
CODEN: PNASA6. ISSN: 0027-8424.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Nov 1995
Last Updated on STN: 9 Nov 1995

L2 ANSWER 53 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Molecular cloning and expression of human cDNAs encoding a novel DNA ligase IV and DNA ligase III, an enzyme active in DNA repair and recombination.
AB Three distinct DNA ligases, I to III, have been found previously in mammalian cells, but a cloned cDNA has been identified only for DNA ligase I, an essential enzyme active in DNA replication. A short peptide sequence conserved close to the C terminus of all known eukaryotic DNA ligases was used to search for additional homologous sequences in human cDNA libraries. Two different incomplete cDNA clones that showed partial homology to the conserved peptide were identified. Full-length cDNAs were obtained and expressed by in vitro transcription and translation. The

103-kDa product of one cDNA clone formed a characteristic complex with the XRCC1 DNA repair protein and was identical with the previously described DNA ligase III. DNA ligase III appears closely related to the smaller DNA ligase II. The 96-kDa in vitro translation product of the second cDNA clone was also shown to be an ATP-dependent DNA ligase. A fourth DNA ligase (DNA ligase IV) has been purified from human cells and shown to be identical to the 96-kDa DNA ligase by unique agreement between mass spectrometry data on tryptic peptides from the purified enzyme and the predicted open reading frame of the cloned cDNA. The amino acid sequences of DNA ligases III and IV share a related active-site motif and several short regions of homology with DNA ligase I, other DNA ligases, and RNA capping enzymes. DNA ligases III and IV are encoded by distinct genes located on human chromosomes 17q11.2-12 and 13q33-34, respectively.

ACCESSION NUMBER: 1995:298466 BIOSIS
DOCUMENT NUMBER: PREV199598312766
TITLE: Molecular cloning and expression of human cDNAs encoding a novel DNA ligase IV and DNA ligase III, an enzyme active in DNA repair and recombination.
AUTHOR(S): Wei, Ying-Fei; Robins, Peter; Carter, Kenneth; Caldecott, Keith; Pappin, Darryl J. C.; Yu, Guo-Liang; Wang, Rui-Ping; Shell, Brenda K.; Nash, Rachel A.; Schar, Primo; Barnes, Deborah E.; **Haseltine, William A.**; Lindahl, Tomas [Reprint author]
CORPORATE SOURCE: Imperial Cancer Res. Fund, Clare Hall Lab., South Mimms, Hertfordshire EN6 3LD, UK
SOURCE: Molecular and Cellular Biology, (1995) Vol. 15, No. 6, pp. 3206-3216.
CODEN: MCEBD4. ISSN: 0270-7306.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Jul 1995
Last Updated on STN: 2 Aug 1995

L2 ANSWER 54 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Functional analysis of the phosphorylation sites on the human immunodeficiency virus type 1 Vpu protein.
AB The human immunodeficiency virus type 1 (HIV-1)-encoded vpu product is a small class 1 integral membrane protein that is phosphorylated by the ubiquitous casein kinase II (CKII) in HIV-1-infected cells. The Vpu protein facilitates the release of budding virions from the surface of infected cells and delays the rate of syncytium formation. In this study, we investigated the role of phosphorylation in the biological activity of Vpu. Our results show that phosphorylation of Vpu occurs on serine residues at positions 52 and 56 located in a highly conserved dodecapeptide sequence. Mutation of either Ser 56, or both Ser 52 and Ser 56 impaired the ability of Vpu to delay the rate of syncytium formation while retaining virion release activity at levels comparable to vpu+ proviruses. Flow cytometry analysis indicates that the relative amounts of envelope glycoprotein gp120 expressed at the surface of cells transfected with these vpu mutant proviruses was two- to threefold greater than that observed on cells transfected with a vpu+ provirus. This increased expression of gp120 at the cell surface may explain the more rapid onset of syncytium formation observed in cell transfected with vpu mutant proviruses. These results suggest that Vpu-facilitated virion release and delayed cytopathic effect are the consequence of two distinct functional activities of the protein.

ACCESSION NUMBER: 1995:182902 BIOSIS
DOCUMENT NUMBER: PREV199598197202
TITLE: Functional analysis of the phosphorylation sites on the human immunodeficiency virus type 1 Vpu protein.
AUTHOR(S): Friborg, Jacques; Ladha, Azim; Gottlinger, Heinrich; **Haseltine, William A.**; Cohen, Eric A. [Reprint author]
CORPORATE SOURCE: Dep. Microbiol. Immunol., Fac. Med., Univ. Montreal, CP6128

Station A, Montreal, PQ H3C 3J7, Canada
SOURCE: Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology, (1995) Vol. 8, No. 1, pp. 10-22.
ISSN: 1077-9450.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Apr 1995
Last Updated on STN: 9 Jun 1995

L2 ANSWER 55 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Characterization of an IL-2 dependent human T cell leukemia virus type I (HTLV-I) infected cell line: A system for studying HTLV-I mediated transformation.
AB The retrovirus Human T cell Leukemia Virus type I (HTLV-I) is the causative agent of Adult T cell Leukemia Lymphoma (ATLL) and is associated with HTLV-1 Myelopathy. HTLV-I mediated transformation of CD4+ T cells, during the course of ATLL, is poorly understood. It has been suggested that HTLV-I is responsible for the immortalization of infected cells, but transformation is dependent on secondary events. To investigate this hypothesis. we have isolated an HTLV-I infected T cell line that is dependent on IL-2 for growth in tissue culture. Further, a subclone of this cell line that is able to grow in the absence of IL-2 has been isolated. Both cell lines have identical TCR chain rearrangements and cell surface markers. Each cell line produces viral mRNAs and proteins. Finally, both of these cell lines are sensitive to rapamycin and cyclosporin A regardless of the presence of IL-2. We propose that this system will provide a unique opportunity to study transformation to IL-2 independence in HTLV-1 infected cells.
ACCESSION NUMBER: 1995:127668 BIOSIS
DOCUMENT NUMBER: PREV199598141968
TITLE: Characterization of an IL-2 dependent human T cell leukemia virus type I (HTLV-I) infected cell line: A system for studying HTLV-I mediated transformation.
AUTHOR(S): Rohwer, Forest; Macmaster, William; **Haseltine, William A.**; Tsoukas, Constantine; McGuire, Kathleen L.
[Reprint author]
CORPORATE SOURCE: Dep. Biol., Mol. Biol. Inst., San Diego State Univ., San Diego, CA 92182, USA
SOURCE: International Journal of Oncology, (1994) Vol. 5, No. 5, pp. 1163-1169.
ISSN: 1019-6439.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Mar 1995
Last Updated on STN: 29 Mar 1995

L2 ANSWER 56 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Integrase mutants of human immunodeficiency virus type 1 with a specific defect in integration.
AB A previous genetic analysis of the human immunodeficiency virus type 1 integrase protein failed to identify single amino acid substitutions that only block the integration of viral DNA (C.-G. Shin, B. Taddeo, W. A. Haseltine, and C. M. Farnet, J. Virol. 68:1633-1642, 1994). Additional substitutions of amino acids that are highly conserved among retroviral integrases were constructed in human immunodeficiency virus type I and analyzed for their effects on viral protein synthesis and processing, virion morphology, and viral DNA synthesis and integration in an attempt to identify mutants with a specific defect in integration. Four single amino acid substitutions resulted in replication defective viruses. Conservative, single amino acid substitutions of the two invariant aspartic acid residues found in all retroviral integrases prevented the integration of viral DNA and had no detectable effect on the other stages in the viral replication cycle, indicating that these mutants exhibited a specific defect in integration. Mutations at two positions, S-81 and

P-109, blocked the integration of viral DNA but also resulted in the production of viral particles that exhibited reduced reverse transcriptase activity, suggesting additional defects in viral replication. Substitution of the highly conserved amino acid T66 had no effect on viral replication in a CD4+ human T-cell line. This analysis extends the range of possible phenotypes that may be produced by single amino acid substitutions in conserved residues of the integrase protein.

ACCESSION NUMBER: 1995:34040 BIOSIS
DOCUMENT NUMBER: PREV199598048340
TITLE: Integrase mutants of human immunodeficiency virus type 1 with a specific defect in integration.
AUTHOR(S): Taddeo, Brunella; **Haseltine, William A.**; Farnet, Chris M. [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., Boston, MA 02115, USA
SOURCE: Journal of Virology, (1994) Vol. 68, No. 12, pp. 8401-8405. CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 25 Jan 1995
Last Updated on STN: 26 Jan 1995

L2 ANSWER 57 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Mutations of two PMS homologues in hereditary nonpolyposis colon cancer.
AB Hereditary nonpolyposis colorectal cancer (HNPCC) is one of man's commonest hereditary diseases'. Several studies have implicated a defect in DNA mismatch repair in the pathogenesis of this disease. In particular, hMSH2 and hMLH1 homologues of the bacterial DNA mismatch repair genes mutS and mutL, respectively, were shown to be mutated in a subset of HNPCC cases. Here we report the nucleotide sequence, chromosome localization and mutational analysis of hPMS1 and hPMS2, two additional homologues of the prokaryotic mutL gene. Both hPMS1 and hPMS2 were found to be mutated in the germline of HNPCC patients. This doubles the number of genes implicated in HNPCC and may help explain the relatively high incidence of this disease.

ACCESSION NUMBER: 1994:482690 BIOSIS
DOCUMENT NUMBER: PREV199497495690
TITLE: Mutations of two PMS homologues in hereditary nonpolyposis colon cancer.
AUTHOR(S): Nicolaides, Nicholas C.; Papadopoulos, Nickolas; Liu, Bo; Wei, Ying-Fel; Carter, Kenneth C.; Ruben, Steven M.; Rosen, Craig A.; **Haseltine, William A.**; Fleischmann, Robert D.
CORPORATE SOURCE: Inq.; Kenneth W. Kinzler, Johns Hopkins Oncol. Cent., Baltimore, MD 21231, USA
SOURCE: Nature (London), (1994) Vol. 371, No. 6492, pp. 75-80. CODEN: NATUAS. ISSN: 0028-0836.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Nov 1994
Last Updated on STN: 9 Nov 1994

L2 ANSWER 58 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Mutation of mutL homolog in hereditary colon cancer.
AB Some cases of hereditary nonpolyposis colorectal cancer (HNPCC) are due to alterations in a mutS-related mismatch repair gene. A search of a large database of expressed sequence tags derived from random complementary DNA clones revealed three additional human mismatch repair genes, all related to the bacterial mutL gene. One of these genes (hMLH1) resides on chromosome 3p21, within 1 centimorgan of markers previously linked to cancer susceptibility in HNPCC kindreds. Mutations of hMLH1 that would disrupt the gene product were identified in such kindreds, demonstrating that this gene is responsible for the disease. These results suggest that defects in any of several mismatch repair genes can cause HNPCC.

ACCESSION NUMBER: 1994:228198 BIOSIS
DOCUMENT NUMBER: PREV199497241198
TITLE: Mutation of mutL homolog in hereditary colon cancer.
AUTHOR(S): Papadopoulos, Nickolas; Nicoladies, Nicholas C.; Wei, Ying-Fei; Ruben, Steven M.; Carter, Kenneth C.; Rosen, Craig A.; **Haseltine, William A.**; Fleischmann, Robert D.; Fraser, Claire M.; Adams, Mark D.; Venter, J. Craig; Hamilton, Stanley R.; Petersen, Gloria M.
CORPORATE SOURCE: Johns Hopkins Oncol. Cent., Baltimore, MD 21231, USA
SOURCE: Science (Washington D C), (1994) Vol. 263, No. 5153, pp. 1625-1629.
CODEN: SCIEAS. ISSN: 0036-8075.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 May 1994
Last Updated on STN: 24 May 1994

L2 ANSWER 59 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Role of the matrix protein in the virion association of the human immunodeficiency virus type 1 envelope glycoprotein.
AB The matrix (MA) protein of human immunodeficiency virus type 1 (HIV-1) forms an inner coat directly underneath the lipid envelope of the virion. The outer surface of the lipid envelope surrounding the capsid is coated by the viral Env glycoproteins. We report here that the HIV-1 capsid-Env glycoprotein association is very sensitive to minor alterations in the MA protein. The results indicate that most of the MA domain of the Gag precursor, except for its carboxy terminus, is essential for this association. Viral particles produced by proviruses with small missense or deletion mutations in the region coding for the amino-terminal 100 amino acids of the MA protein lacked both the surface glycoprotein gp120 and the transmembrane glycoprotein gp41, indicating a defect at the level of Env glycoprotein incorporation. Alterations at the carboxy terminus of the MA domain had no significant effect on the levels of particle-associated Env glycoprotein or on virus replication. The presence of HIV-1 MA protein sequences was sufficient for the stable association of HIV-1 Env glycoprotein with hybrid particles that contain the capsid (CA) and nucleocapsid (NC) proteins of visna virus. The association of HIV-1 Env glycoprotein with the hybrid particles was dependent upon the presence of the HIV-1 MA protein domain, as HIV-1 Env glycoprotein was not efficiently recruited into virus particles when coexpressed with authentic visna virus Gag proteins.
ACCESSION NUMBER: 1994:169996 BIOSIS
DOCUMENT NUMBER: PREV199497182996
TITLE: Role of the matrix protein in the virion association of the human immunodeficiency virus type 1 envelope glycoprotein.
AUTHOR(S): Dorfman, Tatyana; Mammano, Fabrizio; **Haseltine, William A.**; Goettlinger, Heinrich G. [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst., Jimmy Fund Build., Room 824, 44 Binney St., Boston, MA 02115, USA
SOURCE: Journal of Virology, (1994) Vol. 68, No. 3, pp. 1689-1696.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Apr 1994
Last Updated on STN: 8 Apr 1994

L2 ANSWER 60 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Requirement of the Pr55-gag precursor for incorporation of the Vpr product into human immunodeficiency virus type 1 viral particles.
AB The human immunodeficiency virus type 1 (HIV-1) particles consists of two molecules of genomic RNA as well as molecules originating from gag, pol, and env products, all synthesized as precursor proteins. The 96-amino-acid Vpr protein, the only virion-associated HIV-1 regulatory protein, is not part of the virus polyprotein precursors, and its

incorporation into virus particles must occur by way of an interaction with a component normally found in virions. To investigate the mechanism of incorporation of Vpr into the HIV-1 virion, Vpr- proviral DNA constructs harboring mutations or deletions in specific virion-associated gene products were cotransfected with Vpr expressor plasmids in COS cells. Virus released from the transfected cells was tested for the presence of Vpr by immunoprecipitation with Vpr-specific antibodies. The results of these experiments show that Vpr is trans-incorporated into virions but at a lower efficiency than when Vpr is expressed from a proviral construct. The minimal viral genetic information necessary for Vpr incorporation was a deleted provirus encoding only the pr55-gag polyprotein precursor. Incorporation of Vpr requires the expression but not the processing of gag products and is independent of pol and env expression. Direct interaction of Vpr with the Pr55-gag precursor protein was demonstrated by coprecipitation experiments with gag product-specific antibodies. Overall, these results indicate that HIV-1 Vpr is incorporated into the nascent virion through an interaction with the Gag precursor polyprotein and demonstrate a novel mechanism by which viral protein can be incorporated into virus particles.

ACCESSION NUMBER: 1994:169990 BIOSIS
DOCUMENT NUMBER: PREV199497182990
TITLE: Requirement of the Pr55-gag precursor for incorporation of the Vpr product into human immunodeficiency virus type 1 viral particles.
AUTHOR(S): Lavallee, Claude; Yao, Xiao Jian; Ladha, Azim; Goettlinger, Heinrich; **Haseltine, William A.**; Cohen, Eric A. [Reprint author]
CORPORATE SOURCE: Lab. de Retrovirologie Humaine, Dep. de Microbiologie et Immunologie, Fac. de Med., Univ. de Montreal, Montreal, PQ H3C 3J7, Canada
SOURCE: Journal of Virology, (1994) Vol. 68, No. 3, pp. 1926-1934. CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Apr 1994
Last Updated on STN: 8 Apr 1994

L2 ANSWER 61 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Genetic analysis of the human immunodeficiency virus type 1 integrase protein.
AB Single-amino-acid changes in a highly conserved central region of the human immunodeficiency virus type 1 (HTV-1) integrase protein were analyzed for their effects on viral protein synthesis, virion morphogenesis, and viral replication. Alteration of two amino acids that are invariant among retroviral integrases, D116 and E152 of HIV-1, as well as a mutation of the highly conserved amino acid S147 blocked viral replication in two CD4+ human T-cell lines. Mutations of four other highly conserved amino acids in the region had no detectable effect on viral replication, whereas mutations at two positions, N117 and Y143, resulted in viruses with a delayed-replication phenotype. Defects in virion precursor polypeptide processing, virion morphology, or viral DNA synthesis were observed for all of the replication-defective mutants, indicating that changes in integrase can have pleiotropic effects on viral replication.

ACCESSION NUMBER: 1994:169966 BIOSIS
DOCUMENT NUMBER: PREV199497182966
TITLE: Genetic analysis of the human immunodeficiency virus type 1 integrase protein.
AUTHOR(S): Shin, Cha-Gyun; Taddeo, Brunella; **Has ltine, William A.**; Farnet, Chris M. [Reprint author]
CORPORATE SOURCE: Dana-Farber Cancer Inst., 44 Binney St., JFB824, Boston, MA 02115, USA
SOURCE: Journal of Virology, (1994) Vol. 68, No. 3, pp. 1633-1642. CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Apr 1994
Last Updated on STN: 11 May 1994

L2 ANSWER 62 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Mapping of functionally important residues of a cysteine-histidine box in the human immunodeficiency virus type 1 nucleocapsid protein.
AB The human immunodeficiency virus type 1 (HIV-1) nucleocapsid protein contains two copies of a sequence motif, the cysteine-histidine box, that is conserved among retroviruses. To identify the functionally relevant positions of a cysteine-histidine box, each amino acid in the proximal copy of the motif was individually substituted by site-directed mutagenesis. Mutations at 5 of 14 positions abolished virus replication and reduced the viral RNA content of mutant particles to between 10 and 20% of parental levels. Mutations at other positions had either no or only a minor effect on virus replication and virion RNA content. In vitro binding of RNA to bacterially expressed mutant Pr55-gag polyprotein correlated well with the effects of the mutations on particle-associated viral RNA levels. The two different copies of the motif in the HIV-1 nucleocapsid protein are not functionally equivalent, since the conversion of the proximal motif to an exact copy of the distal motif results in a defect in virus replication and a reduction in the viral RNA content of mutant particles. The simultaneous substitution of functionally relevant positions in both motifs led to a significant decline in gag protein export, indicating that the nucleocapsid domain of the gag precursor is also required for efficient assembly or release of the virion.
ACCESSION NUMBER: 1993:507511 BIOSIS
DOCUMENT NUMBER: PREV199396131518
TITLE: Mapping of functionally important residues of a cysteine-histidine box in the human immunodeficiency virus type 1 nucleocapsid protein.
AUTHOR(S): Dorfman, Tatyana; Luban, Jeremy; Goff, Stephen P.; **Haseltine, William A.**; Goettlinger, Heinrich G. [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst., Harvard Med. Sch., Boston, MA 02115, USA
SOURCE: Journal of Virology, (1993) Vol. 67, No. 10, pp. 6159-6169. CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Nov 1993
Last Updated on STN: 5 Nov 1993

L2 ANSWER 63 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Design, intracellular expression, and activity of a human anti-human immunodeficiency virus type 1 gp120 single-chain antibody.
AB A single-chain antibody, derived from a human monoclonal antibody that recognizes the CD4 binding region of the human immunodeficiency virus type 1 (HIV-1) envelope protein, has been designed for intracellular expression in eukaryotic cells. The single-chain antibody is composed of an immunoglobulin heavy-chain leader sequence and heavy and light-chain variable regions that are joined by an interchain linker. The antibody is stably expressed and retained in the endoplasmic reticulum and is not toxic to the cells. The antibody binds to the envelope protein within the cell and inhibits processing of the envelope precursor and syncytia formation. The infectivity of the HIV-1 particles produced by cells that express the single-chain antibody is substantially reduced. These studies illustrate the feasibility of designing antibodies that bind and inactivate molecules intracellularly. Antibodies that act on target molecules within cells should provide a useful tool for research as well as for control of infectious and other diseases.
ACCESSION NUMBER: 1993:454762 BIOSIS
DOCUMENT NUMBER: PREV199396099662

TITLE: Design, intracellular expression, and activity of a human anti-human immunodeficiency virus type 1 gp120 single-chain antibody.
AUTHOR(S): Marasco, Wayne A. [Reprint author]; **Haseltine, William A.**; Chen, Siyi
CORPORATE SOURCE: Dep. Med., Dana-Farber Cancer Inst., Harvard Med. Sch., Harvard Sch. Public Health, 44 Binney St., Boston, MA 02115, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1993) Vol. 90, No. 16, pp. 7889-7893.
CODEN: PNASA6. ISSN: 0027-8424.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Oct 1993
Last Updated on STN: 5 Oct 1993

L2 ANSWER 64 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Vpu protein of human immunodeficiency virus type 1 enhances the release of capsids produced by gag gene constructs of widely divergent retroviruses.
AB The Vpu protein of human immunodeficiency virus type 1 facilitates the release of virus particles from the surface of infected cells. The ability of the Vpu protein to facilitate release of Gag proteins from retroviruses that lack a Vpu-like protein was examined. The results of these experiments show that Vpu significantly increases the release of the Gag proteins of human immunodeficiency virus type 2, visna virus, and Moloney murine leukemia virus from HeLa cells. The results indicate that Vpu-mediated enhancement of particle release requires neither amino-terminal myristoylation of the Gag precursor nor cleavage of the Gag precursor by the viral protease. The results raise the possibility that Vpu modifies a cellular pathway common to the release of all retroviruses from the cell surface.
ACCESSION NUMBER: 1993:432278 BIOSIS
DOCUMENT NUMBER: PREV199396086903
TITLE: Vpu protein of human immunodeficiency virus type 1 enhances the release of capsids produced by gag gene constructs of widely divergent retroviruses.
AUTHOR(S): Gottlinger, Heinrich G. [Reprint author]; Dorfman, Tatyana [Reprint author]; Cohen, Eric A.; **Haseltine, William A.** [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., 44 Binney St., Boston, MA 02115, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1993) Vol. 90, No. 15, pp. 7381-7385.
CODEN: PNASA6. ISSN: 0027-8424.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Sep 1993
Last Updated on STN: 22 Sep 1993

L2 ANSWER 65 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Early molecular replication of human immunodeficiency virus type 1 in cultured-blood-derived T helper dendritic cells.
AB The rate and efficiency of key steps in the life cycle of the human immunodeficiency virus type 1 was examined in three primary cell types, T cells, monocytes, and T helper dendritic cells using the same quantity of virus involved and same cell number. The results show that viral DNA synthesis proceeds much more rapidly and efficiently in primary T helper dendritic cell populations than in primary T cell and monocyte populations. The increased rate of virus DNA synthesis is attributable either to an increase in the efficiency and the rate of uptake of the virus particles by the T helper dendritic cells, as compared with that in other cell types, or to an increased efficiency and rate of viral DNA

synthesis in the T helper dendritic cells. In the subsequent phase of viral expression the appearance of spliced viral mRNA products also occur more rapidly in cultures of primary-blood-derived T helper dendritic cells than is the case in primary T cells and monocytes. The increased efficiency of the early steps of HIV-1 replication in primary-blood-derived T helper dendritic cells than in other blood-derived mononuclear cells raises the possibility that these cells play a central role in HIV-1 infection and pathogens.

ACCESSION NUMBER: 1993:367258 BIOSIS
DOCUMENT NUMBER: PREV199396052933
TITLE: Early molecular replication of human immunodeficiency virus type 1 in cultured-blood-derived T helper dendritic cells.
AUTHOR(S): Langhoff, Erik [Reprint author]; Kalland, Karl H.; **Haseltine, William A.**
CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., 44 Binney St., Boston, MA 02115, USA
SOURCE: Journal of Clinical Investigation, (1993) Vol. 91, No. 6, pp. 2721-2726.
CODEN: JCINAO. ISSN: 0021-9738.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Aug 1993
Last Updated on STN: 6 Aug 1993

L2 ANSWER 66 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI A possible role of dendritic cells in HIV-1 replication and transmission.
ACCESSION NUMBER: 1993:353170 BIOSIS
DOCUMENT NUMBER: PREV199345036595
TITLE: A possible role of dendritic cells in HIV-1 replication and transmission.
AUTHOR(S): Langhoff, Erik; **Haseltine, William A.**
CORPORATE SOURCE: Div. Hum. Retrovirol., Dana-Farber Cancer Inst., Boston, MA, USA
SOURCE: Koff, W. C. [Editor]; Wong-Staal, F. [Editor]; Kennedy, R. C. [Editor]. AIDS Res. Rev., (1993) pp. 59-71. AIDS Research Reviews.
Publisher: Marcel Dekker, Inc., 270 Madison Avenue, New York, New York 10016, USA; Marcel Dekker, Inc., Basel, Switzerland. Series: AIDS Research Reviews.
CODEN: ARRVEZ. ISSN: 1056-1080. ISBN: 0-8247-9045-6.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 31 Jul 1993
Last Updated on STN: 31 Jul 1993

L2 ANSWER 67 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Effect of nef alleles on replication of human immunodeficiency virus type 1.
AB The effect of multiple alleles of nef of the human immunodeficiency virus type 1 (HIV-1) on virus replication was examined. Nef alleles used include some derived from isolates of virus passaged in tissue culture as well as other obtained by direct cloning of viral DNA from tissues of infected patients. The effect of nef on virus replication was evaluated in the context of a derivative of the HXB2 provirus shown previously to require nef for rapid growth in CD4+ human T cell lines and in primary peripheral blood mononuclear cells. The results of the experiments show that in this genetic context all of the studied viruses carrying nef alleles that express stable Nef proteins replicate more rapidly than do their, otherwise isogenic, nef-defective counterparts. Two of the nef alleles derived from primary tissues produce unstable proteins. These studies demonstrate that naturally occuring nef alleles can increase the rate of virus replication in both primary peripherals blood mononuclear cells and in a CD4+ T cell line. The results also demonstrate that functional variation exists among naturally occurring nef alleles.

ACCESSION NUMBER: 1993:273958 BIOSIS
DOCUMENT NUMBER: PREV199396004183
TITLE: Effect of nef alleles on replication of human immunodeficiency virus type 1.
AUTHOR(S): Zazopoulos, Emmanuel; **Haseltine, William A.** [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., 44 Binney St., Boston, MA 02115, USA
SOURCE: Virology, (1993) Vol. 194, No. 1, pp. 20-27.
CODEN: VIRLAX. ISSN: 0042-6822.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Jun 1993
Last Updated on STN: 9 Jun 1993

L2 ANSWER 68 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI RNA tumor viruses.
ACCESSION NUMBER: 1993:238916 BIOSIS
DOCUMENT NUMBER: PREV199344112116
TITLE: RNA tumor viruses.
AUTHOR(S): Fine, Howard A. [Reprint author]; **Haseltine, William A.**
CORPORATE SOURCE: Div. Clin. Oncol., Dana-Farber Cancer Inst., Boston, MA, USA
SOURCE: Holland, J. F. [Editor]; Freii, E., III [Editor]; Bast, R. C., Jr. [Editor]; Kufe, D. W. [Editor]; Morton, D. L. [Editor]; Weichselbaum, R. R. [Editor]. (1993) pp. 2) 265-282. Cancer medicine, Third edition, Vols. 1 and 2. Publisher: Lea and Febiger, 200 Chesterfield Parkway, Malvern, Pennsylvania 19355, USA; Lea and Febiger, London, England, UK.
ISBN: 0-8121-1422-1.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 15 May 1993
Last Updated on STN: 15 May 1993

L2 ANSWER 69 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI The NF-kappa-B p65 promoter.
AB The promoter of the human gene encoding the p65 subunit of the transcription factor NIF-kB was cloned and the nucleotide sequence determined. The p65 promoter lacks both TATA and CCAAT consensus sequences. The p65 promoter contains three consensus binding sites of the transcription factor SP1. In contrast to the promoter of the p50 subunit of NF-KB, no sequences predicted to bind NF-KB are present in the p65 promoter. Phorbol ester (PMA) and phytohemagglutinin (PHA) treatment of Jurkat cells did not activated the p65 promoter in transient transfection experiments. Using different deletion mutants of the p65 promoter, essential promoter elements were mapped.
ACCESSION NUMBER: 1993:228529 BIOSIS
DOCUMENT NUMBER: PREV199395119704
TITLE: The NF-kappa-B p65 promoter.
AUTHOR(S): Ueberla, Klaus; Lu, Yichen; Chung, Eugene; **Haseltine, William A.** [Reprint author]
CORPORATE SOURCE: Dana-Farber Cancer Inst., JF824, 44 Binney St., Boston, MA 02115, USA
SOURCE: Journal of Acquired Immune Deficiency Syndromes, (1993) Vol. 6, No. 3, pp. 227-230.
CODEN: JAISET. ISSN: 0894-9255.
DOCUMENT TYPE: Article
LANGUAGE: English
OTHER SOURCE: Genbank-LO1459
ENTRY DATE: Entered STN: 7 May 1993

Last Updated on STN: 7 May 1993

L2 ANSWER 70 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI The effect of vpu on HIV-1-induced syncytia formation.
AB To investigate the role of vpu in the cytopathicity of human immunodeficiency type 1 (HIV-1), the MT4 CD4+ T-cell line was infected with viruses that were isogenic except for their ability to produce the vpu protein. The experiments described here demonstrate that expression of vpu reduces HIV-1 cytopathic effects by decreasing the rate of syncytia formation. By reducing the concentration of gp120 at the cell surface, vpu limits cell killing by syncytia formation.
ACCESSION NUMBER: 1993:214203 BIOSIS
DOCUMENT NUMBER: PREV199395115428
TITLE: The effect of vpu on HIV-1-induced syncytia formation.
AUTHOR(S): Yao, Xiao Jian; Garzon, Simon; Boisvert, Francoise; **Haseltine, William A.**; Cohen, Eric A. [Reprint author]
CORPORATE SOURCE: Lab. de Retrovirol. Hum., Dep. Microbiol. Immunol., Fac. Med., Univ. Montreal, Montreal, PQ H3C 3J7, Canada
SOURCE: Journal of Acquired Immune Deficiency Syndromes, (1993) Vol. 6, No. 2, pp. 135-141.
CODEN: JAISET. ISSN: 0894-9255.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Apr 1993
Last Updated on STN: 23 Apr 1993

L2 ANSWER 71 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Disulfide bond formation in the human immunodeficiency virus type 1 Nef protein.
AB Substitution of alanine for cysteine residues of the human immunodeficiency virus type 1 LAI (BRU) and ELI Nef proteins was used to determine pairing of the cysteine residues present in each protein. The results show that under nonreducing conditions, alternative pairing of the cysteines occurs. The preferred pairing of cysteine residues of the LAI and ELI proteins differs. In the experimental system used, viruses carrying the ELI nef allele are found to express Nef proteins which accelerate virus replication. Mutation in critical cysteine residues of the protein reduce the rate of virus replication. In the same system, viruses harboring the LAI nef allele fail to replicate. These observations raise the possibility that differences in the observed biological activity of nef alleles may be attributed, at least in part, to differences in the secondary structure of the proteins.
ACCESSION NUMBER: 1993:214199 BIOSIS
DOCUMENT NUMBER: PREV199395115424
TITLE: Disulfide bond formation in the human immunodeficiency virus type 1 Nef protein.
AUTHOR(S): Zazopoulos, Emmanuel; **Haseltine, William A.** [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst., 44 Binney St., Boston, MA 02115, USA
SOURCE: Journal of Virology, (1993) Vol. 67, No. 3, pp. 1676-1680.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Apr 1993
Last Updated on STN: 24 Apr 1993

L2 ANSWER 72 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Influence of human T-cell leukemia virus type I tax and rex on interleukin-2 gene expression.
AB The X region of human T-cell leukemia virus type I (HTLV-I) encodes two proteins that regulate viral gene expression. The tax protein is the product of the transactivator gene and has been shown to up-regulate the

expression of some cellular genes controlling T-cell replication, including that of the interleukin-2 (IL-2) T-cell growth hormone and the alpha chain of its receptor (IL-2R). Several studies have shown that tax transactivation of the IL-2R alpha-chain promoter is mediated by binding sites for the transcriptional activator NF-kappa-B, and this mechanism has also been implicated in the tax activation of IL-2 promoter activity. The rex gene product of HTLV-1 regulates viral protein production by influencing mRNA expression and has been implicated in the stabilization of IL-2R alpha-chain mRNA. In the present studies, the ability of the tax and rex proteins to transactivate IL-2 gene expression has been reinvestigated. The ability of the tax protein to transactivate IL-2 promoter activity appears, at least in part, to be mediated by the recognition sequence for a DNA-binding complex known as CD28RC. Consistent with this hypothesis is the observation that tax-mediated activation of IL-2 gene expression is resistant to the immunosuppressive affects of cyclosporin A, a property postulated for the CD28RC binding complex. Unexpectedly, this tax-mediated up-regulation of IL-2 expression is synergized by the presence of the rex protein. These findings demonstrate that transactivation of IL-2 gene expression by tax is augmented by mechanisms distinct from NF-kappa-B and raise the possibility that rex, as well as tax, contributes to the oncogenic capability of HTLV-I by altering the expression of the IL-2 gene in T cells infected with this retrovirus.

ACCESSION NUMBER: 1993:209106 BIOSIS
DOCUMENT NUMBER: PREV199395110331
TITLE: Influence of human T-cell leukemia virus type I tax and rex on interleukin-2 gene expression.
AUTHOR(S): McGuire, Kathleen L. [Reprint author]; Curtiss, Virginia E.; Larson, Erica L.; **Haseltine, William A.**
CORPORATE SOURCE: Dep. Biol., Coll. Sci., San Diego State Univ., San Diego, CA 92182-0057, USA
SOURCE: Journal of Virology, (1993) Vol. 67, No. 3, pp. 1590-1599. CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Apr 1993
Last Updated on STN: 23 Apr 1993

L2 ANSWER 73 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Complex-type N-linked oligosaccharides of gp120 from human immunodeficiency virus type 1 contain sulfated N-acetylglucosamine.
AB The major envelope glycoproteins gp120 and gp41 of human immunodeficiency virus type 1, the causative agent for human AIDS, contain numerous N-linked oligosaccharides. We report here our discovery that N-acetylglucosamine residues within the complex-type N-linked oligosaccharides of both gp120 and its precursor, gp160, are sulfated. When human Molt-3 cells persistently infected with human T-cell leukemia virus III-B were metabolically radiolabeled with 35SO-4, gp160, gp120, and to some extent gp41 were radiolabeled. The 35SO-4-labeled oligosaccharides were quantitatively released by N-glycanase treatment and were bound by immobilized Ricinus communis agglutinin I, a lectin that binds to terminal P-galactosyl residues. The kinetics of release of sulfate upon acid hydrolysis from 35SO-4-labeled gp120 indicate that sulfation occurs in a primary sulfate ester linkage. Methylation analysis of total glycopeptides from Molt-3 cells metabolically radiolabeled with (3H)glucosamine demonstrates that sulfation occurs at the C-6 position of N-acetylglucosamine. Fragmentation of the gp120-derived 35SO-4-labeled glycopeptides by treatment with hydrazine and nitrous acid and subsequent reduction generated galactosyl-anhydromannitol-6-35SO-4, which is the expected reaction product from GlcNAc-6-sulfate within a sulfated lactosamine moiety. Charge analysis of the (3H)galactose- and (3H)glucosamine-labeled glycopeptides from gp120 and gp160 indicates that approximately 14% of the complex-type N-linked oligosaccharides are sulfated.

ACCESSION NUMBER: 1993:148372 BIOSIS
DOCUMENT NUMBER: PREV199395081172
TITLE: Complex-type N-linked oligosaccharides of gp120 from human immunodeficiency virus type 1 contain sulfated N-acetylglucosamine.
AUTHOR(S): Shilatifard, Ali; Merkle, Roberta K.; Helland, Dag E.; Welles, Jacqueline L.; **Haseltine, William A.**; Cummings, Richard D. [Reprint author]
CORPORATE SOURCE: Dep. Biochem. and Molecular Biol., Univ. Okla. Health Sci. Cent., P.O. Box 26901, 941 S. L. Young Boulevard, Oklahoma City, OK 3104, USA
SOURCE: Journal of Virology, (1993) Vol. 67, No. 2, pp. 943-952.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Mar 1993
Last Updated on STN: 17 Mar 1993

L2 ANSWER 74 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Infection of human natural killer (NK) cells with replication-defective human T cell leukemia virus type I provirus: Increased proliferative capacity and prolonged survival of functionally competent NK cells.
AB Human T-cell leukemia virus type I (HTLV-I) can infect a variety of human cell types, but only T lymphocytes are efficiently immortalized after HTLV-I infection. This study reports an attempt to infect and to immortalize NK cells with HTLV-I. Co-cultivation of freshly isolated NK cells with a HTLV-I-producing T cell line did not result in NK cell infection. However, NK cells activated with an anti-CD16 mAb and co-cultivated with a HTLV-I-producing T cell line were reproducibly infected by HTLV-I. HTLV-I infection was documented in NK cell lines and clones by the detection of defective integrated provirus by both Southern blot and polymerase chain reaction analysis. Although HTLV-I-infected NK cells produced viral proteins, they did not produce infectious viral particles. HTLV-I-infected NK cells have phenotypically indistinguishable from their uninfected counterparts (CD16+, CD2+, CD56+, CD3-). They also retained the ability to mediate both natural and antibody-dependent cell cytotoxicity. The IL-2-dependent proliferation of HTLV-I-infected NK cells was significantly greater than that of uninfected NK cells. The doubling time of this infected population was reduced from 9 days to 3 days, and the overall survival of the culture in the absence of restimulation was extended from 5 wk to 18 wk. Unlike T lymphocytes, HTLV-I-infected NK cells were not immortal, implying a fundamental difference between these two lymphocyte populations.
ACCESSION NUMBER: 1993:118274 BIOSIS
DOCUMENT NUMBER: PREV199395062374
TITLE: Infection of human natural killer (NK) cells with replication-defective human T cell leukemia virus type I provirus: Increased proliferative capacity and prolonged survival of functionally competent NK cells.
AUTHOR(S): Lo, K. M. Steve; Vivier, Eric; Rochet, Nathalie; Dehni, Ghassan; Levine, Herbert; **Haseltine, William A.**; Anderson, Paul [Reprint author]
CORPORATE SOURCE: Div. Tumor Immunology, Dana-Farber Cancer Inst., 44 Binney St., Boston, Mass. 02115, USA
SOURCE: Journal of Immunology, (1992) Vol. 149, No. 12, pp. 4101-4108.
CODEN: JOIMA3. ISSN: 0022-1767.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Feb 1993
Last Updated on STN: 27 Feb 1993

L2 ANSWER 75 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Infection of accessory dendritic cells by human immunodeficiency virus

type 1.
ACCESSION NUMBER: 1993:86648 BIOSIS
DOCUMENT NUMBER: PREV199344040898
TITLE: Infection of accessory dendritic cells by human immunodeficiency virus type 1.
AUTHOR(S): Langhoff, Erik; **Haseltine, William A.** [Reprint author]
CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., Harv. Med. Sch., 44 Binney St., Boston, Mass. 02115, USA
SOURCE: Journal of Investigative Dermatology, (1992) Vol. 99, No. 5, pp. 89S-94S.
Meeting Info.: Third International Workshop on Langerhans Cells. Dallas, Texas, USA. December 5-6, 1991.
CODEN: JIDEAE. ISSN: 0022-202X.
DOCUMENT TYPE: Article
Conference; (Meeting)
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Feb 1993
Last Updated on STN: 1 Feb 1993

L2 ANSWER 76 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Ganglioside-induced CD4 endocytosis occurs independent of serine phosphorylation and is accompanied by dissociation of P56-lck.
AB Gangliosides induce a selective and complete modulation of CD4 from the surface of T cells. CD4 down-modulation occurs by CD4 endocytosis. This process is independent of serine phosphorylation of the cytoplasmic tail or CD4 and does not require the association between the tyrosine protein kinase p56-lck and the cytoplasmic tail of CD4. Ganglioside induced CD4 endocytosis is accompained by the loss of p56-lck activity associated with CD4. Sequential immunoprecipitation analysis using an anti-CD4 antibody and an anti-p56-lck antiserum showed that this is caused by the dissociation of the enzyme from the cytoplasic tail of CD4. The kinetics of p56-lck dissociation after ganglioside treatment is identical to that of CD4 endocytosis, suggesting that p56-lck is displaced in the process of endosome formation. The results indicate that CD4 endocytosis alone can cause the dissociation of the p56-lck complex without the requirement for Cd4 phosphorylation.
ACCESSION NUMBER: 1993:74771 BIOSIS
DOCUMENT NUMBER: PREV199395039271
TITLE: Ganglioside-induced CD4 endocytosis occurs independent of serine phosphorylation and is accompanied by dissociation of P56-lck.
AUTHOR(S): Repke, Heinrich [Reprint author]; Barber, Elizabeth; Ulbricht, Stefanie; Buchner, Klaus; Hucho, Ferdinand; Kopp, Richard; Scholz, Hans; Rudd, Christopher E.; **Haseltine, William A.**
CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber-Cancer Inst., 44 Binney St., Boston, MA 02115, USA
SOURCE: Journal of Immunology, (1992) Vol. 149, No. 8, pp. 2585-2591.
CODEN: JOIMA3. ISSN: 0022-1767.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jan 1993
Last Updated on STN: 27 Jan 1993

L2 ANSWER 77 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Role of vif in replication of human immunodeficiency virus type 1 in CD4-positive T lymphocytes.
AB The viral infectivity factor gene vif of human immunodeficiency virus type 1 has been shown to affect the infectivity but not the production of virus particles. In this study, the effect of vif in the context of the HXB2 virus on virus replication in several CD4+ T-cell lines was investigated. vif was found to be required for replication in the CD4+ T-cell lines CEM

and H9 as well as in peripheral blood T lymphocytes. vif was not required for replication in the SupT1, C8166, and Jurkat T-cell lines. The infectivity of vif-defective viruses depended on the cell type in which the virus was produced. In CEM cells, vif was required for production of virus capable of initiating infection in all cell lines studied. vif-defective virus produced by SupT1, C8166, and Jurkat cells and the monkey cell line COS-1 could initiate infection in multiple cell lines, including CEM and H9. These results suggest that vif can compensate for cellular factors required for production of infectious virus particles that are present in some cell lines such as SupT1, C8166, and Jurkat but are absent in others such as CEM and H9 as well as peripheral blood T lymphocytes. The effect of vif was not altered by deletion of the carboxyl terminus of gp41, a proposed target for vif (B. Guy, M. Geist, K. Dott, D. Spehner, M.-P. Kieny, and J.-P. Lecocq, J. Virol. 65:1325-1331, 1991). These studies demonstrate that vif enhances viral infectivity during virus production and also suggest that vif is likely to be important for natural infections.

ACCESSION NUMBER: 1993:34860 BIOSIS
DOCUMENT NUMBER: PREV199395023060
TITLE: Role of vif in replication of human immunodeficiency virus type 1 in CD4-positive T lymphocytes.
AUTHOR(S): Gabuzda, Dana H.; Lawrence, Katharine; Langhoff, Erik; Terwilliger, Ernest; Dorfman, Tatyana; **Haseltine, William A.**; Sodroski, Joseph [Reprint author]
CORPORATE SOURCE: Division Human Retrovirology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, Mass. 02115, USA
SOURCE: Journal of Virology, (1992) Vol. 66, No. 11, pp. 6489-6495. CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Dec 1992
Last Updated on STN: 23 Dec 1992

L2 ANSWER 78 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Characterization of the cDNA of a broadly reactive neutralizing human anti-gp120 monoclonal antibody.
AB The F105 mAb, identified in an HIV-1-infected individual, binds to a discontinuous epitope on HIV-1 gp120 envelope glycoprotein, blocks the binding of gp120 to CD4 viral receptor, and neutralizes a broad range of HIV-1 isolates. This study reports the primary nucleotide and deduced amino acid sequences of the rearranged heavy and light chains of the mAb F105. This IgG-1k mAb uses a V-H gene member of the V-H4 gene family (V71-4) and is productively rearranged with a D-D fusion product of the dlr4 and da4 germline D-H genes and the J-H5 gene. This rearrangement heavy chain gene expresses the V-H4-HV2a idiotope, which is seen in human monoclonal IgM colde agglutinins. The F105 V-k appears to be derived from the Humvk325 germline gene and is rearranged with a J-k2 gene. For both chains, the mutational pattern in the rearranged V-H and V-L genes is indicative of an antigen-driven process. These studies show that production of a broadly neutralizing anti-HIV-1 antibody that recognizes determinants within the CD4 recognition sites of the envelope glycoprotein is achieved by rearrangement of the V71-4 and Humvk325 germline variable region genes along with selected individual point mutations in the rearranged genes.

ACCESSION NUMBER: 1993:28788 BIOSIS
DOCUMENT NUMBER: PREV199395016988
TITLE: Characterization of the cDNA of a broadly reactive neutralizing human anti-gp120 monoclonal antibody.
AUTHOR(S): Marasco, Wayne A. [Reprint author]; Bagley, Jessamyn; Zani, Christy; Posner, Marshall; Cavacini, Lisa; **Haseltine, William A.**; Sodroski, Joseph
CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst. 44 Binney St., Boston, Mass. 02115, USA
SOURCE: Journal of Clinical Investigation, (1992) Vol. 90, No. 4,

pp. 1467-1478.
CODEN: JCINAO. ISSN: 0021-9738.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Dec 1992
Last Updated on STN: 23 Dec 1992

=> s albumin fusion protein () shelf life
L6 3 ALBUMIN FUSION PROTEIN (W) SHELF LIFE

=> d l6 ti abs ibib tot

L6 ANSWER 1 OF 3 USPATFULL on STN
TI Albumin fusion proteins
AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

ACCESSION NUMBER: 2003:282700 USPATFULL
TITLE: Albumin fusion proteins
INVENTOR(S): Ballance, David J., Berwyn, PA, UNITED STATES
Sleep, Darrell, West Bridgford, UNITED KINGDOM
Prior, Christopher P., Rosemont, PA, UNITED STATES
Sadeghi, Homayoun, Doylestown, PA, UNITED STATES
Turner, Andrew J., Eagleville, PA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003199043	A1	20031023	
APPLICATION INFO.:	US 2001-832501	A1	20010412	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-256931P	20001221	(60)
	US 2000-199384P	20000425	(60)
	US 2000-229358P	20000412	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 60
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 14339

L6 ANSWER 2 OF 3 USPATFULL on STN
TI Albumin fusion proteins
AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion

proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:244853 USPATFULL			
TITLE:	Albumin fusion proteins			
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Sadeghi, Homayoun, Doylestown, PA, UNITED STATES Prior, Christopher P., Rosemont, PA, UNITED STATES Turner, Andrew J., Eagleville, PA, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003171267	A1	20030911	
APPLICATION INFO.:	US 2001-833117	A1	20010412	(9)
	NUMBER		DATE	
PRIORITY INFORMATION:	US 2000-256931P		20001221	(60)
	US 2000-199384P		20000425	(60)
	US 2000-229358P		20000412	(60)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850			
NUMBER OF CLAIMS:	59			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	20 Drawing Page(s)			
LINE COUNT:	13208			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 3 USPATFULL on STN

TI Albumin fusion proteins

AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:181414 USPATFULL			
TITLE:	Albumin fusion proteins			
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Haseltine, William A., Washington, DC, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003125247	A1	20030703	
APPLICATION INFO.:	US 2001-833041	A1	20010412	(9)
	NUMBER		DATE	
PRIORITY INFORMATION:	US 2000-256931P		20001221	(60)
	US 2000-199384P		20000425	(60)
	US 2000-229358P		20000412	(60)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850			
NUMBER OF CLAIMS:	29			

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 15235
CAS INDEXING IS AVAILABLE FOR THIS PATENT.